

Copy **90**
72 Pages

TOP SECRET

November 1964

25X1

**EVALUATIONS OF SOVIET
SURFACE-TO-SURFACE
MISSILE DEPLOYMENT
15TH REVISION**

**A Report of the Deployment Working Group
of the
Guided Missiles and Astronautics Intelligence Committee**

25X1



DECLASS REVIEW by NIMA/DOD

TOP SECRET

GROUP 1
Excluded from automatic
downgrading and declassification

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

**EVALUATIONS OF SOVIET
SURFACE-TO-SURFACE
MISSILE DEPLOYMENT**

15TH REVISION

A Report of the Deployment Working Group

of the

Guided Missiles and Astronautics Intelligence Committee

25X1

November 1964

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

The Guided Missiles and Astronautics Intelligence Committee (GMAIC) wishes to express its appreciation to the National Photographic Interpretation Center for its assistance in the editing, illustration, and publication of this report.

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

PREFACE

This report, published bimonthly by the GMAIC Deployment Working Group (DWG), provides a comprehensive, ready-reference listing of all ICBM, IRBM, and MRBM deployment locations, types of site configurations, photographic references, estimated construction and operational status, and other evaluations by the DWG. These data constitute the majority view of the DWG membership, and may not correspond precisely to individual assessments by each member. Additional data may be added to future revisions.

Dissemination of the report was previously limited to holders of the DWG report, Soviet Surface-to-Surface Missile Deployment. Because the information contained herein is both supplemental and self-sustaining, distribution will no longer be limited to holders of the above report.

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

CONTENTS

	Page
INTRODUCTION.	1
Table 1. Summary of Estimated Status of Identified ICBM, IRBM, and MRBM Launchers at Deployed Complexes	44
Table 2. Summary Evaluation of Soviet ICBM Deployment	45
Table 3. Summary Evaluation of Soviet IRBM Deployment	49
Table 4. Summary Evaluation of Soviet MRBM Deployment	51
Table 5. Summary Evaluation of Soviet Fixed Field Sites (SSM Fixed Field Positions) . .	58
Table 6. Composition of IRBM/MRBM Complexes	62

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

TOP SECRET

25X1

25X1

25X1

ILLUSTRATIONS

	Page
Figure 1. Deployment of Soviet ICBM Complexes	Facing 1
Figure 2. Typical Configurations of ICBM Launch Sites, and Explanation of Types	2
Figure 3. Aleysk ICBM Complex	11
Figure 4. Dombrovskiy ICBM Complex	12
Figure 5. Imeni Gastello ICBM Complex	13
Figure 6. Kartaly ICBM Complex	14
Figure 7. Uzhur ICBM Complex	15
Figure 8. Launch Sites C(3), D(4), and E(5), Zhangiz-Tobe	16
Figure 9. Complex Support Facility, Zhangiz-Tobe	17
Figure 10. Probable Launch Sites G(9) and H(10), Plesetsk	18
Figure 11. Launch Site F, Plesetsk	18
Figure 12. Launch Site A3(15), Tyuratam	19
Figure 13. Launch Complex B, Tyuratam	20
Figure 14. Probable Missile at Launch Complex C, Tyuratam	21
Figure 15. Launch Site D2(9), Tyuratam	22
Figure 16. Launch Complex E(6), Tyuratam	23
Figure 17. Launch Site G1/G2(7), Tyuratam	24
Figure 18. Launch Site G3/G4(11), Tyuratam	24
Figure 19. Launch Site G5/G6(12), Tyuratam	24
Figure 20. Launch Site G7(18), Tyuratam	25
Figure 21. Launch Site G8/G9(19), Tyuratam	25
Figure 22. Launch Complex H(8), Tyuratam	26
Figure 23. Launch Complex I(14), Tyuratam	27
Figure 24. Complex J, Tyuratam	28
Figure 25. Launch Complex K(13), Tyuratam	29
Figure 26. Communications Facility, Svobodnyy	30

X1

25X1

viii

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

ILLUSTRATIONS (Continued)

Page

25X1

Figure 29. Deployment of Soviet IRBM/MRBM Complexes	32
Figure 30. Typical Configurations of IRBM/MRBM Launch Sites	34
Figure 31. Kalnik, Petrovskiy and Novosysoyevka 2 IRBM Sites.	37
Figure 32. Redkino and Postavy 2 MRBM Sites	38
Figure 33. Launch Complex A, Kapustin Yar.	39
Figure 34. Launch Area 1C, Kapustin Yar	40
Figure 35. Launch Site 4C1, Kapustin Yar	40
Figure 36. Probable Missile Assembly and Checkout Area Northwest of Launch Complex C, Kapustin Yar.	41
Figure 37. Launch Complex E, Kapustin Yar	42
Figure 38. New Construction Northeast of Launch Complex E, Kapustin Yar .	42
Figure 39. New Bivouac/Training Area West of Launch Complex E, Kapustin Yar	42

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

TOP SECRET

25X1

25X1

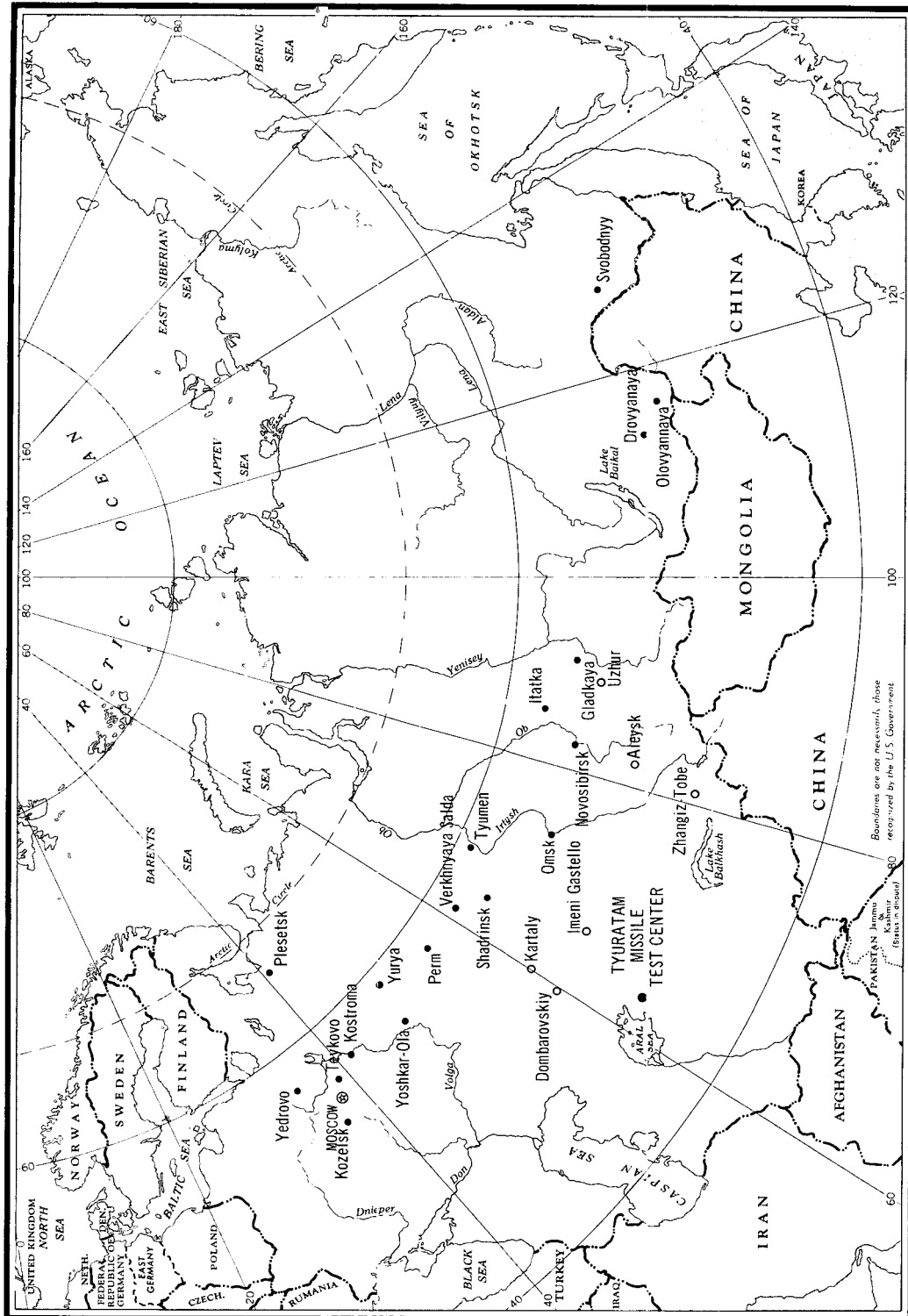


FIGURE 1. DEPLOYMENT OF SOVIET ICBM COMPLEXES.

25X1

TOP SECRET

25X1

Approved For Release

TOP SECRET

2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1

INTRODUCTION

This report is the 15th Revision of Evaluations of Soviet Surface-to-Surface Missile Deployment prepared by the Deployment Working Group of the Guided Missiles and Astronautics Intelligence Committee. The 14th Revision, [redacted] and disseminated under control number [redacted] can be destroyed in accordance with existing instructions for handling [redacted] materials.

[redacted] and continuing analysis of previous missions and other sources have provided additional information on the Soviet strategic ballistic missile deployment program. The new data are reflected in Table 1 and in the estimated operational status shown in Tables 2, 3, and 4. Cutoff date for information contained in this report is [redacted]

25X1

25X1

25X1

SOVIET ICBM DEPLOYMENT

The most significant development in Soviet ICBM deployment since our last revision is the identification of 5 new single-silo complexes, at Aleysk (52-29N 82-43E), Dombrovskiy (51-00N 59-48E), Imeni Gastello (51-07N 66-07E), Kartaly (53-03N 60-34E), and Uzhur (55-17N 89-49E). Single-silo sites at these complexes range from 2 to 6 in number. In addition, 3 new single-silo sites have been identified at Zhangiz-Tobe, bringing to 5 the total at this previously identified complex. Also significant is the identification of 2 probable rail-served soft sites at Plesetsk, the abandonment of a Type IIIA hard site at Yedrovo, and the assessment of Launch Site G8/G9 at Tyuratam as a hardened site instead of a soft configuration as previously estimated.

hard launchers are 35 single-silo configurations. Eleven of the complexes contain both hard and soft launchers, 4 contain only soft, and 9 have hard silos only. The number of sites identified at individual complexes continues to range from a low of one at Omsk to a high of 11 at Yurya. With the exception of the 2 new probable soft sites at Plesetsk and the previously reported 6-single-silo configuration at Olovyannaya, no new ICBM site construction has been firmly identified at the 18 older complexes since [redacted]

25X1

Of the 269 identified launchers, 197 are considered to be operational, including 51 in a hard configuration. In addition, we believe that 19 of the 35 confirmed launchers at the Tyuratam Missile Test Center, including 6 hard, are operational. However, we judge that these R&D launchers are not normally available for operational use, although varying numbers of them could be so utilized, depending on the amount of advance notice.

The ICBM launch sites have been designated by type as shown and explained in Figure 2. We are still unable to determine whether the single-silo configurations identified at Tyuratam and

CURRENT DEPLOYMENT

The number of identified ICBM complexes is now 24, with search for new single-silo locations continuing on a priority basis. See Figure 1 for locations of deployed ICBM complexes.

The 24 complexes now contain a total of 269 confirmed and probable launchers, of which 150 are soft and 119 are hard. Included in the

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

at deployed complexes are associated with one or several different missile systems. Neither can we ascertain the final configuration (s) for these sites, nor for the new probable rail-served soft sites at Plesetsk. Therefore, we have not added them to Figure 2 and will refer to these configurations as Type III (single) and Type IB, respectively.

Evaluation of all evidence received since our last revision has resulted in changes at the following complexes:

ADDITIONS:

ALEYSK (New complex), Launch Sites A-F (1-6), Type III (single), under construction

DOMBAROVSKIY (New complex), Launch Sites A-E (4,3,2,1,6) Type III (single), under construction

IMENI GASTELLO (New complex), Launch Sites A-E (1-15), Type III (single), under construction

KARTALY (New complex), Probable Launch Sites A(1) and B(2), Type III (single), under construction; possible Launch Site C, Type III (single), under construction

PLESETSK, Probable Launch Sites G(9) and H(10), Type IB, under construction

UZHUR (New complex), Launch Sites A-F (1-6), Type III (single), under construction

ZHANGIZ-TOBE, Launch Sites C(3), D(4), and E(5), Type III (single), under construction

DELETIONS:

YEDROVO, Launch Site H(9), Type IIIA, abandoned

SINGLE-SILO COMPLEXES

The 6 single-silo complexes identified to date (excluding Launch Group D at the Olovyannaya Complex) now contain a total of 29 confirmed and probable launch silos in early and midstages of construction. Total silos within the individual complexes range from a low of 2 (plus one possible) at Kartaly to a high of 6 at Aleysk and Uzhur.

Our knowledge of the extent and pace of the single-silo deployment program is limited in many respects, but several broad observations can be made. All 6 complexes are rail served, and all are located in the south-central USSR in a belt generally south of that containing the 18 older complexes. The earliest construction at any of the single-silo complexes began in [] following the cessation of construction starts of older site configurations and abandonment of several that were in an early stage of construction. Construction of the first silos probably commenced about [] and, if our current estimate that construction time will approximate 15 months is correct, these will be operational by the second quarter of [] All single-silo complexes identified to date should be complete by the end []

We cannot judge with confidence whether the silos at these 6 complexes are for a single missile system, or for two or more. There are certain similarities between the site configurations, and the dimensions of the silo corings appear to be generally of the same order of magnitude. There are also apparent differences between complexes, although we have observed none to date that cannot be explained by differences in construction techniques and/or the fact that not all are in the same stage of construction. If these complexes are for a single missile system, then the best candidate appears to be the SS-9, since R&D on this system is nearing completion and our estimate of initial operational capability of the SS-9 system approximates the time frame when the first sites should be operational.

25X1

25X1

25X1

25X1

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

We still have no firm evidence of the manner in which launch control will be exercised within each complex. There is no evidence of construction of a central control facility at any of the 6 complexes, nor can we identify separate control facilities at any of the individual silos within these complexes.

Aleysk Complex

This complex currently contains a complex support facility, a probable rail-to-road transfer point, and 6 silos, all in a midstage of construction (Figure 3). The complex can be negated in [redacted] The first launch site was under construction in [redacted] although no work had been begun on the complex support facility at that time.

Dombarovskiy Complex

This complex was not present in [redacted] First coverage was obtained in [redacted] when 2 launch sites were observed on both [redacted] The complex currently consists of a complex support facility, 4 confirmed single silos in a midstage of construction, and a probable 5th silo in an early stage (Figure 4). Launch Site B (3) is secured by a perimeter fence which forms a pattern similar to that at Launch Complex I (14) at Tyuratam. The fenced area is large enough to contain an interferometer, but none is yet under construction.

Imeni Gastello Complex

Imeni Gastello, the most recently identified complex, was first observed in [redacted] Although the lack of prior coverage precludes a firm negation date, construction status on available photography indicates that work on the complex was begun early [redacted] No coverage of this complex has been obtained since [redacted] At that time it consisted of a complex support facility and 5 single silos, all in a midstage of construction (Figure 5).

Kartaly Complex

This probable single-silo complex was first visible on [redacted] It consists of a probable complex support facility and 2 probable and one possible launch site, all in an early stage of construction (Figure 6). Construction was probably initiated after [redacted] although only the probable complex support facility and probable Launch Site B(2) can be negated on [redacted]

The probable complex support facility consists of 2 groups of buildings and a candelabra of 4 rail sidings; a nearby rail spur extends to a point which may be the location of a rail-to-road transfer point. Probable Launch Sites A(1) and B(2) consist of small secured areas with several small buildings and evidence of nearby excavations. Possible Launch Site C consists of a larger secured area and a small excavation.

Uzhur Complex

[redacted] revealed a new ICBM complex under construction near Uzhur, approximately 110 nautical miles southwest of Krasnoyarsk. The complex consists of a complex support facility, a possible rail-to-road transfer point, and 6 single-silo launch sites, all but one in a midstage of construction (Figure 7). The complex support facility and Launch Sites B(2) and D(4) were in an early stage of construction in [redacted]

Zhangiz-Tobe Complex

[redacted] revealed 3 new single-silo launch sites under construction at Zhangiz-Tobe (Figure 8), bringing to 5 the total sites at this complex. Launch Site C(3), previously carried as an unidentified area of activity, first appeared in [redacted] and can be negated in [redacted] This site is currently in a [redacted]

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

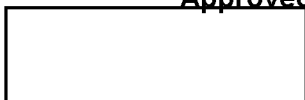
25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

CIA-RDP78T04757A000300010014-1

25X1



25X1

25X1

25X1

midstage of construction. The newly identified Launch Site D(4) can be negated on [REDACTED]. It is in a midstage of construction and consists of a silo under construction within a U-shaped excavation. Launch Site E(5), now in an early construction stage, consists of a U-shaped excavation. This site can be negated in [REDACTED]. [REDACTED] also revealed that Launch Sites A(1) and B(2) had progressed to midstage, and that about 35 buildings have been added to the complex support facility (Figure 9) since [REDACTED].

and which we have previously estimated as probably representing initial deployment of the SS-9. Launch Site A(1) is of the older group of Type IIIA sites which are firmly identified with the SS-7 system. Flim Flam backtracking indicates that Launch Site D1 at Tyuratam has been modified to launch SS-9s, and we note that similar modification of Launch Site A(1) at Olovyannaya could result in its being converted to an SS-9 complex exclusively. However, as with Launch Site D1 at Tyuratam, we have no photographic evidence that such modification has occurred or is currently underway.

25X1

25X1

25X1

25X1

OLOVYANNAYA COMPLEX

Olovyannaya remains the only one of the 18 older complexes at which single-silo deployment has been identified. [REDACTED] [REDACTED] revealed that construction is continuing at Launch Group D (4-10), which includes the 6 single-silos reported in our 14th Revision. Launch Sites B(2) and C(3), both Type IIIA, are in a late stage of construction and nearing completion. No change was observed at Launch Site A (1), a completed Type IIIA configuration.

We are still unable to relate the silos at Launch Group D to specific counterparts at Tyuratam, although we believe that such an association exists. Neither can we determine whether these silos are the same as those at any of the other single-silo complexes. However, we do believe that the single silos at Olovyannaya are probably for the SS-9 missile. We base this judgment on the timing of single-silo construction at the complex in relation to SS-9 flight test activity, as well as similarities between the SS-9 and the older SS-7 missile system for which the Olovyannaya Complex was originally constructed. We have also considered that Launch Sites B(2) and C(3) are of the group of 11 Type IIIA sites which were begun [REDACTED].

TYPE IIIA SITES

[REDACTED] revealed that Yedrovo Launch Site H(9), a Type IIIA, was abandoned in a midstage of construction. We had been carrying this site as operational, based on construction timing, although it had not been observed clearly since [REDACTED]. We suspect that 2 uncompleted sites, Kostroma H(8) and Gladkaya E(6), may have suffered a similar fate, but we are awaiting good quality photographic coverage before dropping them from the ICBM site inventory.

Construction of the remaining 9 uncompleted Type IIIA sites is continuing at an accelerated pace, however, and several will probably be completed before the [REDACTED]. If so, construction of these sites, all of which were begun [REDACTED] will have been accomplished in considerably less than the 22- 24-month average we observed for earlier sites of this type, all of which are currently operational.

PLESETSK COMPLEX

New Probable Launch Sites

[REDACTED] revealed 2 apparently identical probable launch sites, designated G(9) and H(10), under construction east of Launch Site D at Plesetsk. Mission

25X1

25X1

TOP SECRET

25X1



25X1

25X1



furnished further details (Figure 10). These appear to be rail-served soft sites, the rails being mirror images and forming a wishbone configuration. Each site consists of 3 excavations on a north-south axis, the center one measuring 115 by 100 feet; foundations or footings for buildings are under construction in each excavation. On either side of each site is a relatively deep, notched excavation approximately 180 by 70 feet. At probable Launch Site G(9), linear trenching connects the outer notched excavation with the northernmost and southernmost building excavations. At probable Launch Site H(10), the rail track has been extended into the launch site and terminates in 3 deadend spurs.

We are unable to associate these new launch sites with any prototype at the Tyuratam Missile Test Center. However, new construction activity at Launch Complex B at Tyuratam (see below) may be related.

Launch Site F

In our last revision we reported that construction was underway on a unique soft launch site at Plesetsk. We pointed out that this 2-pad configuration appeared to resemble Launch Site 5C1 at the Kapustin Yar Missile Test Center rather than any known ICBM configuration.

25X1

[Redacted] showed that this site is now complete, with well-defined pads and a road network (Figure 11). There is a missile-ready building, and at least 3 other structures, along or near the access road.

25X1

[Redacted] each pad had an unidentified circular object near the center.

We still do not know the function of this launch facility, but do not believe its primary purpose to be that of an operational ICBM site.

KOZELSK COMPLEX

Launch Site F(6) at Kozelsk appeared to be

complete on [Redacted] and we are now carrying the site as operational. We are now carrying all SS-8 sites, both hard and soft, as complete and operational.

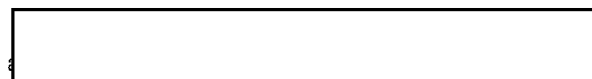
25X1

PERM COMPLEX

In our last revision we reported an area of unidentified activity at the Perm ICBM Complex which was suspect for a single-silo launch site. Subsequent coverage indicates that this facility is probably a communications or radar site, and we are dropping it from the suspect list.

TYURATAM MISSILE TEST CENTER

Test Range Facilities



25X1

[Redacted] provided fair-to-excellent coverage of the launch facilities at Tyuratam. Highlights included the addition of L-shaped interferometers at Launch Complexes I(14) and G; the association of Launch Areas A3(15) and B2(16) with Launch Complex I(14); new construction activity at Launch Complex B; the initiation of construction of a possible launch area at Complex J; and the identification of missiles or missile components at several launch complexes.

25X1

At Launch Complex A on [Redacted] a probable missile component approximately 105 feet long was observed on a rail car adjacent to Pad A1(1). Again on [Redacted] a linear object approximately [Redacted] was located behind the same pad. No significant change was noted at Pad A2 on any of these missions. Launch Site A3(15) is now confirmed as a single-silo in a midstage of construction. The excavation contains a silo 50 to 60 feet square, with a circular opening approximately 30 feet in diameter (Figure 12). The silo has not yet been brought up to ground level. A linear scar extends from this

25X1

25X1

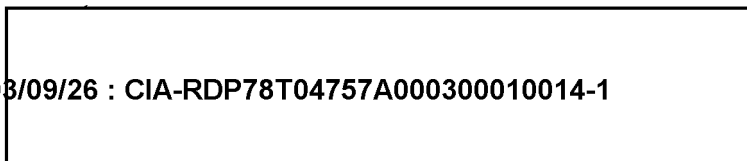
25X1

25X1

25X1

25X1

TOP SECRET



25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1



25X1

launch site to Launch Complex I(14).

At Launch Complex B (Figure 13), nothing significant has been noted at Pad B1(2) since our 14th Revision.

confirmed that Launch Site B2(16) is a single-silo launch facility, and revealed a straight-line earth scar, possibly a cable ditch, extending southwestward from the launch site to Launch Complex I(14). When last observed on the site was in a midstage of construction, with the silo already up to ground level. The silo is 50 to 60 feet square, with a circular opening approximately 30 feet in diameter. A building approximately 100 feet long is under construction north of the silo, and within the loop road which has been surfaced. Launch Site B-3(17), a single oval launch pad and loop road similar to Pad C3 at Launch Complex C, remains in a late stage of construction. We still cannot determine the function of this launch site.

revealed an area of new construction activity approximately 1,000 feet east of Pad B1(2), and within the secured area. It consists of one rectangular and 2 square excavations. While we are not as yet assigning a launch function to this new activity, we note that the early construction pattern is similar in some respects to that at the new probable soft Launch Sites G(9) and H(10) at Plesetsk.

At Launch Complex C(3), a probable missile or missile components were observed on 2 separate occasions (Figure 14). In a probable missile approximately 100 feet long was observed in a horizontal position on Pad C1. In a light-toned linear object approximately 100 feet long was visible on the apron between the assembly/checkout and missile-ready buildings.

No significant change in facilities has been noted at Launch Site D1(4), Launch Complex D,

since our last revision. Launch Site D2(9) was still in a late stage of construction when last observed on

All 3 silo covers were open, and the site did not have the clean appearance of a completed launch site (Figure 15). Ditching and small excavations in the southern part of the secured area indicate that further construction is in progress. The associated L-shaped electronic facility appears to be complete.

No significant change in facilities is evident at Launch Complex E(6). However, missile or possible missile components were observed on 3 separate occasions. a probable missile approximately long and 10 feet wide was erected on Pad E3 (Figure 16). Also, an unidentified object approximately 90 feet long was positioned adjacent to the west end of the ready building serving Pad E1. an unidentified linear object approximately 85 feet in length was apparent on the rail in front of the ready building associated with Pad E1. a few days later, showed that this object was still in place, and that a missile was erected on Pad E3 (Figure 16). Mensuration of an indistinct shadow indicates that the erected missile was at least 75 feet in length; the diameter could not be determined.

No change in facilities at Launch Complex F(5) has been noted since our last revision. However, increased track activity between Complex F(5) and Complex K(13) indicates that support facilities at the prototype SS-8 hard site are being utilized in the construction of Complex K(13).

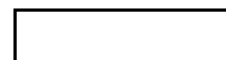
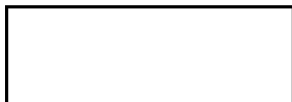
Excellent coverage of Launch Complex G indicates that construction activity at the various sites comprising this complex is progressing at a rapid pace. We reported in the 14th Revision that Launch Site G1/G2(7) was complete. Subsequent coverage and other evidence confirms

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

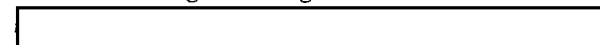


25X1

this judgment, and the fact that this site is being utilized for flight testing of the SS-10. The non-

converge to the rear of Pad G6, where a gantry is under construction. It appears that one gantry will service both pads. The launch site in the vicinity of the pads has a clean completed appearance on

25X1



25X1

indicates that at least 3 pairs of rails extend from the G2 ready building and converge as they approach the launch pad (Figure 17). Four rail cars were visible on these rails. On

Launch Site G7 (18) is confirmed as a single silo in a midstage of construction (Figure 20). The launch site is double fenced.

25X1

the gantry associated with Pad G1 is in the center of the pad, although it cannot be determined whether or not there is a missile within the gantry.

a probable liner extends upward out of the silo core. A cylindrical object, probably a silo liner segment, is adjacent to the excavation.

25X1

25X1

25X1

25X1

25X1

We are still carrying Launch Site G3/G4 (11) in a late stage of construction, although it appears that Pad G4 is complete on

an L-shaped electronic facility, whose legs are approximately 1,250 feet in length, is apparently under construction within the secured area.

25X1

25X1

Pad G3, however, is still under construction, with construction materials and equipment clearly evident on this and subsequent missions.

25X1

also revealed an L-shaped electronic facility under construction behind the launch site. The legs of the L are approximately 1,100 feet long.

Launch Site G8/G9 (19), observed on excellent coverage on

25X1

25X1

a probable missile component (or mock-up) is visible on the rail adjacent to Pad G4 (Figure 18). The object appears to be wider on the end nearest the launch pad. The overall length of the object is approximately

This site contains 2 silos 385 feet apart, and positioned beside straight segments of a loop road (Figure 21). The site is enclosed by a double security fence. The inside diameter of the silos is approximately 20 feet.

25X1

25X1

25X1

25X1

25X1

25X1

feet. The narrower portion measures approximately

25X1

25X1

The wider portion measures about long and

several days later, the gantry is in the center of Pad G4 and shadow analysis indicates that a missile or missile component may be present within the gantry.

revealed a square structure below ground level near each silo, and connected to it by a conduit. Ditches are visible extending from the silo excavations to an excavation containing a probable control bunker.

showed that the silos and their associated buildings have been backfilled. A small earth mound is visible on the side of the loop road opposite each silo.

No change in facilities is apparent on coverage of Launch Complex H(8), associated with the SS-9, since our last revision. However, a missile was erected on Pad H2 on (Figure 22). Tentative mensuration of the shadow cast by the missile indicates a length of approximately 105 feet.

25X1

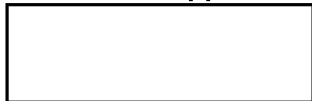
25X1

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1



25X1

25X1

Launch Complex I(14), a single-silo site, was in a midstage of construction when last observed on [REDACTED] (Figure 23). The silo has been brought up to ground level but has not been backfilled. A building approximately 80 feet long has been constructed within the loop road. An L-shaped electronic device, with legs approximately 1,280 feet long, was first observed on [REDACTED]

25X1

25X1

[REDACTED] Mensuration of the silo excavation taken from this mission indicates an outside dimension approximately 50 by 50 feet, with a hole approximately 25 feet in diameter. A ground scar between Launch Complex I(14) and Launch Site A3(15), and a ditch between this complex and Launch Site B2(16) indicate an association between these launch facilities. We cannot, however, firmly associate these sites with deployed single-silo sites.

25X1

25X1

The beginning of what may be a launch facility at Complex J was noted on [REDACTED] [REDACTED] An irregular excavation and numerous vehicles are discernible in a scarred area approximately 3,000 feet north-east of the end of the road leading eastward from the support facility (Figure 24). Construction continues on the building east of the main rail spur.

Launch Complex K(13) is now confirmed as a hard launch facility containing 2 single silos in a midstage of construction. The silos are separated by a distance of 1,100 feet, and connected by ditching to a separately secured, L-shaped electronic facility and possible control area (Figure 25). The silos measure approximately 50 feet square, with circular openings about 30 feet in diameter. In most respects the silos are similar to those at Launch Complexes A, B, G (excluding G8/G9(19), and I(14).

Test Range Activity

25X1

ICBM firing activity at Tyuratam during the period [REDACTED] consisted

of 9 launches, compared to 13 such operations during the [REDACTED] [REDACTED] 25X1
ered in our 14th Revision.

Five ICBM firings, plus a space launch (Cosmos 46), occurred during the period [REDACTED] 25X1
[REDACTED] apparently as part of a demonstration for visiting dignitaries. All currently identified ICBM missile systems except the SS-6 were involved in these demonstration firings to Kamchatka and the extended Pacific Impact Area.

SS-7s were launched successfully to Kamchatka on [REDACTED] 25X1
The probable test range launch facilities involved in the [REDACTED] firings were Launch Complexes C and D, respectively. The launch point for the [REDACTED] firing cannot be identified. 25X1

Only one SS-8 was launch during the period, and this as part of the demonstration. The firing occurred on [REDACTED] and apparently reached the Klyuchi Impact Area on Kamchatka successfully. This was the first firing of an SS-8 since [REDACTED] 25X1

SS-9 firings, all apparently successful, included 2 to the 7,000-nautical mile Pacific impact Area on [REDACTED] and one to Kamchatka on [REDACTED] 25X1
The launch facilities involved in these firings cannot be determined. 25X1

SS-10s were launched successfully on [REDACTED] 25X1
[REDACTED] Both reached Kamchatka and Flim Flam data indicated Launch Complex G as the launch point. 25X1

COMMUNICATIONS FACILITIES AT DEPLOYED ICBM COMPLEXES

A communications site similar to those previously identified at the Yoshkar-Ola, Novosibirsk, Tyumen, and Verkhnyaya Salda ICBM Complexes was observed at the Svobodnyy Complex on [REDACTED] 25X1
The site contains 5 fishbone receiving antennas under construction and at least one dipole (Figure 26).

25X1

TOP SECRET

25X1



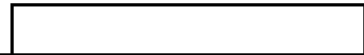
25X1

25X1

Activity was first observed in this area on



25X1



25X1



ing ICBM sites. There is no evidence of an intent or capability to refire from hard sites, and we do not believe that such a capability exists. [redacted] material and [redacted] evidence dating back to [redacted] establish that refire from soft MRBM sites was both intended as an operational concept and practiced in exercises, although no evidence of live firings of refire missiles is available. There is little doubt that soft ICBM sites were designed to have a refire capability. The number and size of missile-ready buildings at deployed sites provide concrete evidence of such an intent. We are unable, however, to determine the actual number of missiles available for refire from soft ICBM sites, since no direct evidence is available. Our analysis also has been tempered by the belief that current US first-strike and retaliatory capabilities would limit or preclude Soviet refire from a significant number of soft sites.

25X1

25X1

25X1

We conclude, also, that the refire capability is not uniform throughout the Soviet ICBM force. This judgment is based on the fact that the number, size, and configuration of missile-ready buildings at individual sites vary considerably. A rough measure of the maximum capability for refire can be obtained by an analysis of the capacity of the missile-ready buildings at each site, assuming reasonable space requirements for maintenance and check-out as well as storage of ready missiles. This analysis indicates that the number of ready missiles in these buildings could total as many as 400 ICBMs for the 146 soft launchers currently operational. Some limitations as to the magnitude of the total missiles available can be deduced from evidence of missile production, despite the fact that such evidence is inconclusive and certainly not good enough to determine a precise figure. This evidence, based on an analysis of floorspace at known ICBM production plants and so-called "batch testing"

REFIRE CAPABILITY

We have completed an analysis of Soviet refire capability at ICBM sites and a summary of our current conclusions is presented below. Additional study of this problem is underway and a more detailed presentation of our analysis and rationale will be contained in a forthcoming revision.

There is ample evidence that Soviet operational concepts for strategic missile forces include a refire capability from soft sites, includ-

TOP SECRET

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1

at Tyuratam, indicates that about 2 missiles are available for each SS-6 and SS-8 soft launcher, and 2 or somewhat less for those employing the SS-7. These figures are in addition to a single missile for each operational hard launcher.

These analyses indicate that the missiles available to the currently operational force

of 197 launchers (including 51 silos) for initial salvo, refire, and maintenance spares may range from a low of about 350 to a possible high of as many as 450. If the low side of this range is more accurate, then it would seem likely that some sites might have a multiple refire capability, while others have none.

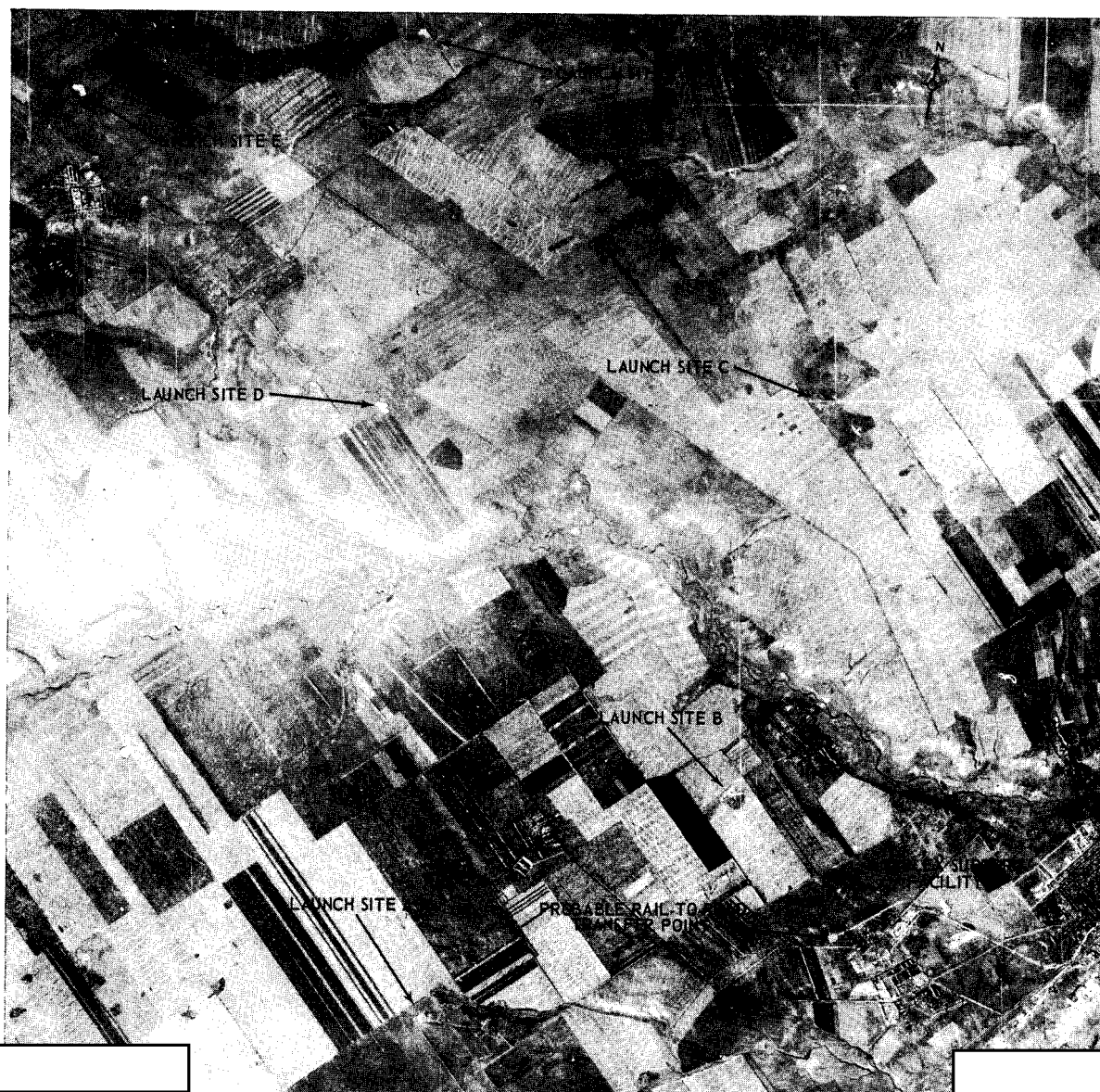


FIGURE 3. ALEYSK ICBM COMPLEX.

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

TOP SECRET

25X1

25X1



25X1

FIGURE 4. DOMBAROVSKIY ICBM COMPLEX.

25X1

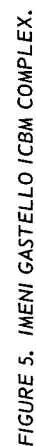
25X1

TOP SECRET

TOP SECRET 25A1
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

0014-1

5X1



25X

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1



25X1



25X1

FIGURE 6. KARTALY ICBM COMPLEX.

25X1

25X1

25X1

TOP SECRET
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1



25X1

FIGURE 7. UZHUR ICBM COMPLEX.

25X1

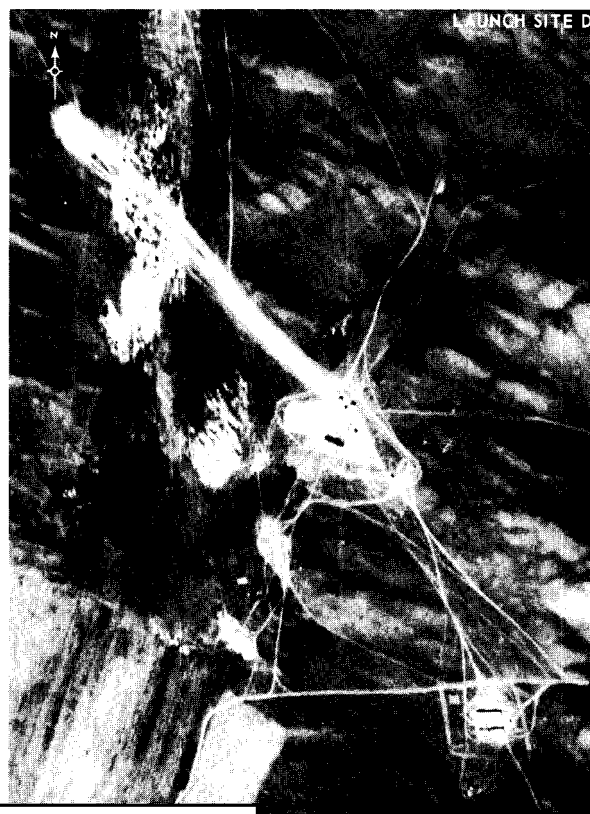
TOP SECRET
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

TOP SECRET

25X1

25X1



25X1

25X1

25X1



25X1

25X1

FIGURE 8. LAUNCH SITES C(3), D(4), AND E(5), ZHANGIZ-TOBE.

TOP SECRET

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1

25X1

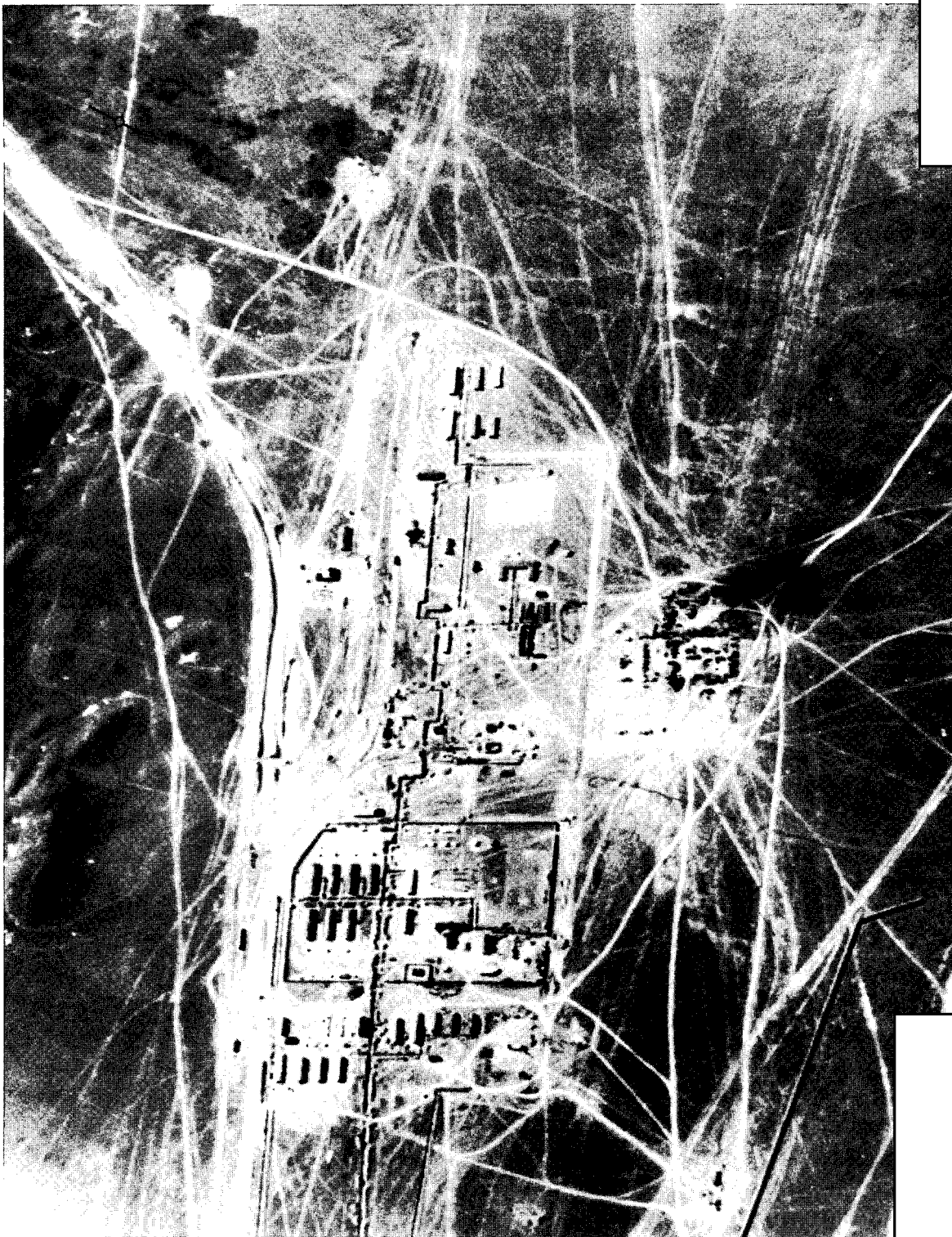


FIGURE 9. COMPLEX SUPPORT FACILITY, ZHANGIZ-TOBE.

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

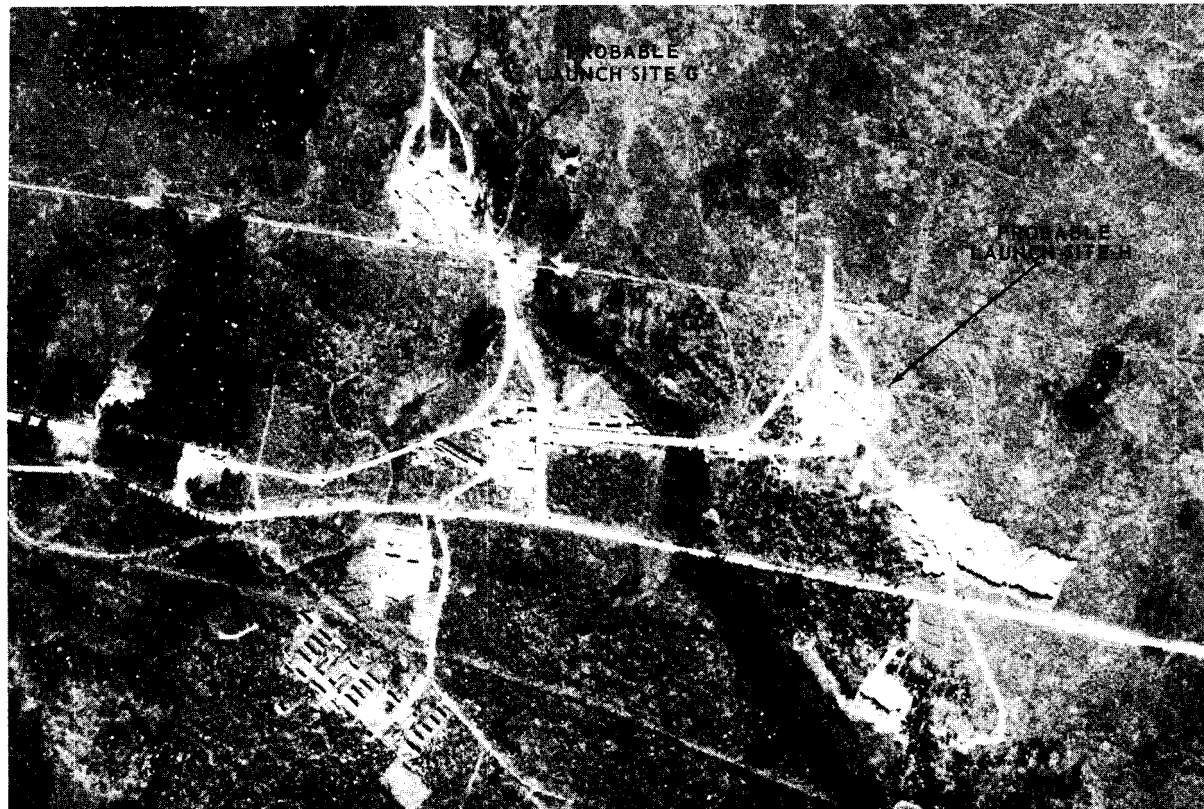
TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

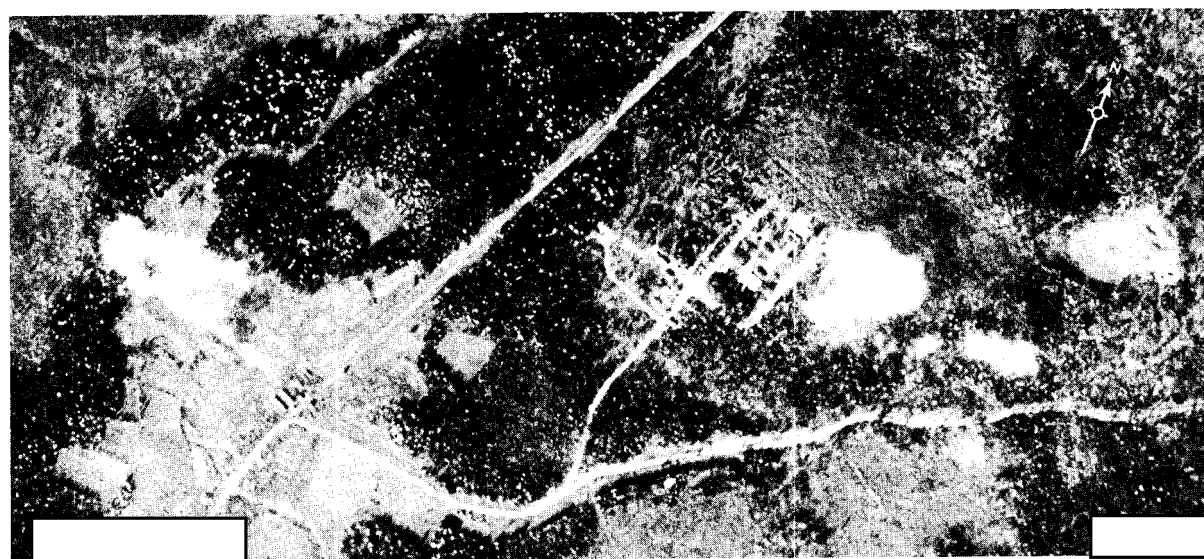
25X1



25X1

25X1

FIGURE 10. PROBABLE LAUNCH SITES G(9) AND H(19), PLESETSK.



25X1

25X1

FIGURE 11. LAUNCH SITE F, PLESETSK.

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1



25X1

25X1

FIGURE 12. LAUNCH SITE A3(15), TYURATAM.

25X1

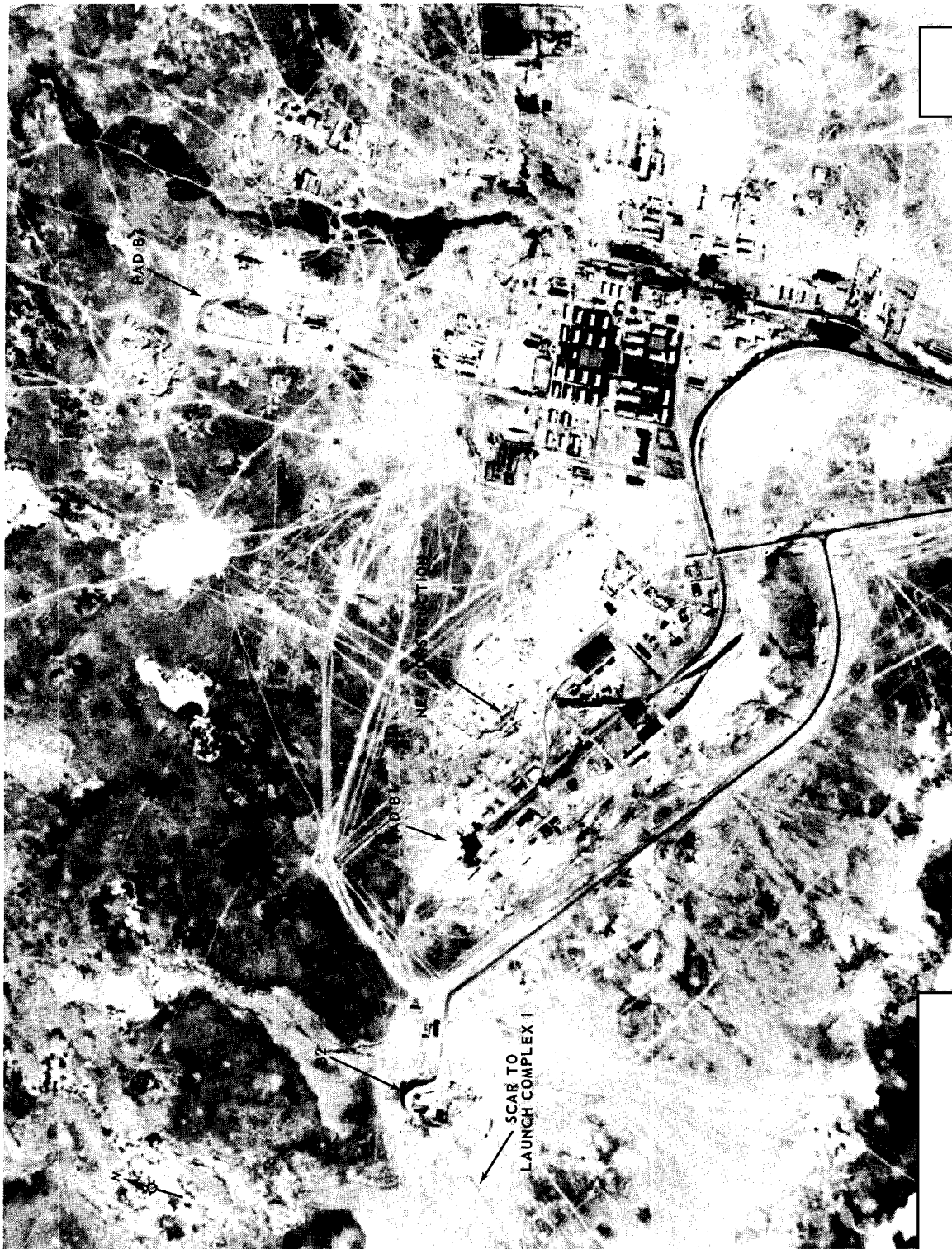
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

TOP SECRET

25X1

25X1



25X1

FIGURE 13. LAUNCH COMPLEX B, TYURATAM.

25X1

25X1

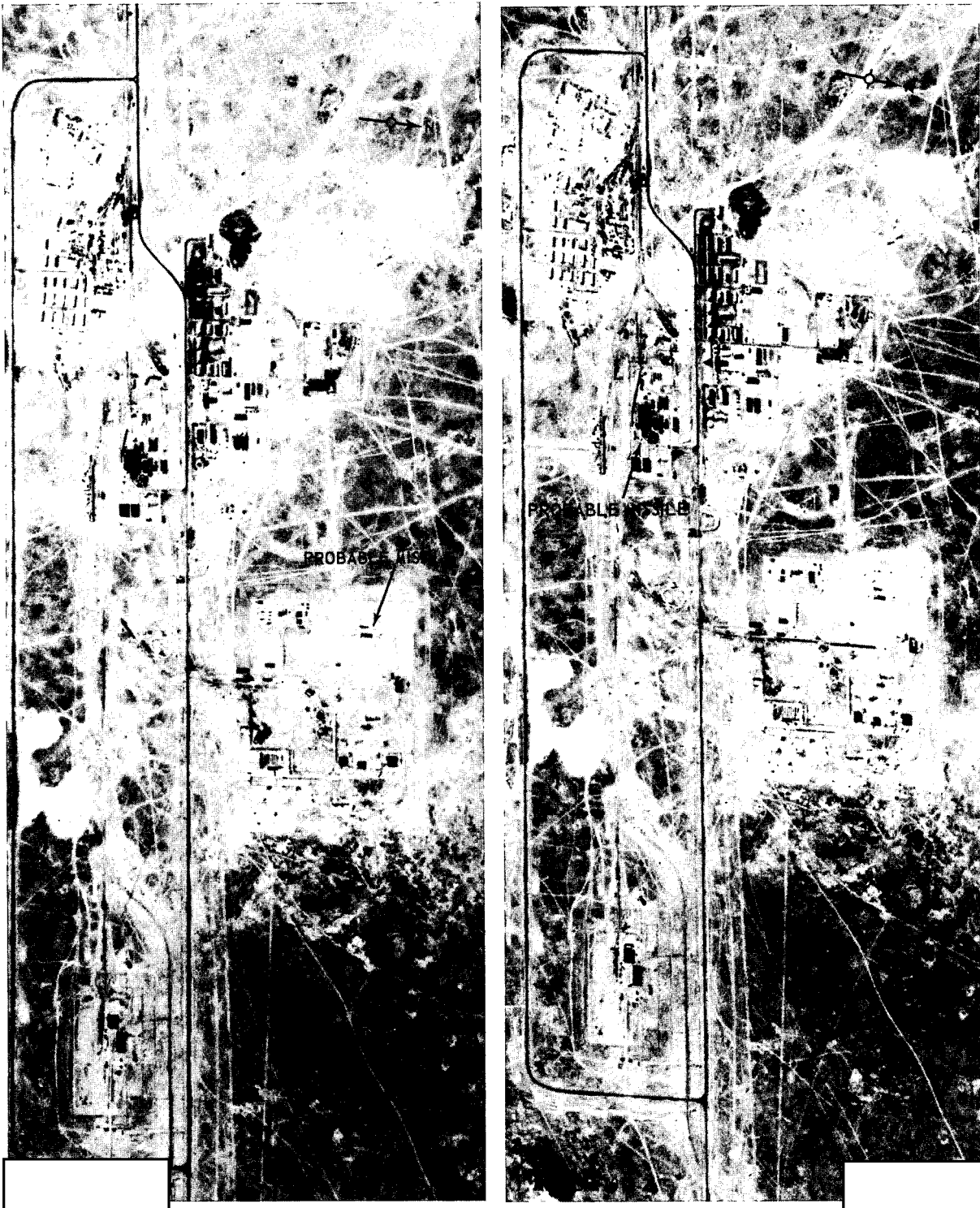
TOP SECRET

25X1

TOP SECRET
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1



25X1

25X1

FIGURE 14. PROBABLE MISSILE AT LAUNCH COMPLEX C, TYURATAM.

25X1

25X1

25X1



25X1

FIGURE 15. LAUNCH SITE D2(9), TYURATAM.

25X1

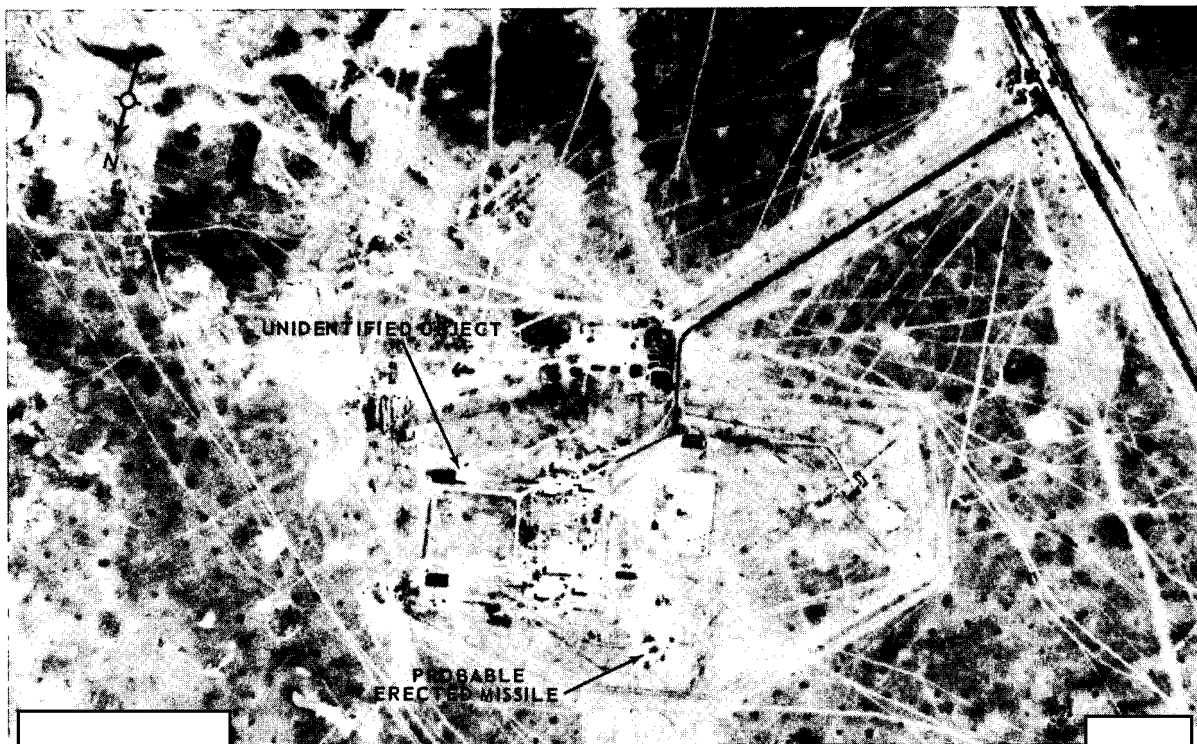
25X1

25X1

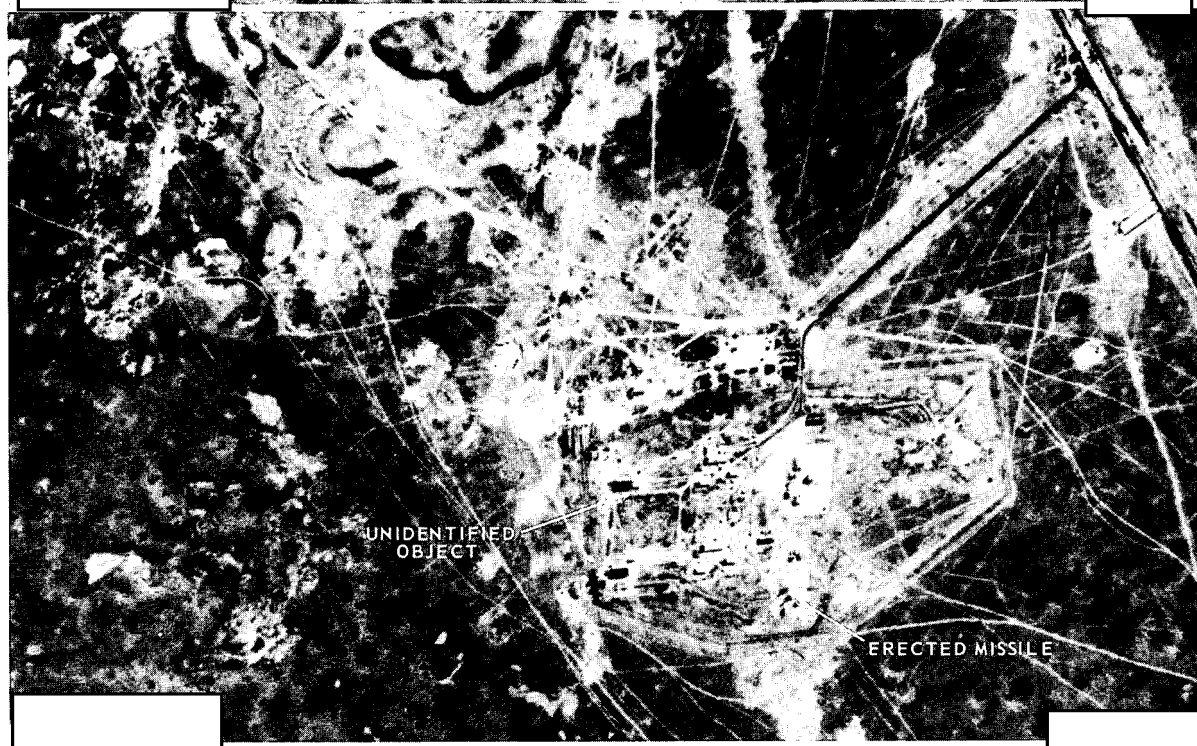
TOP SECRET
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1



25X1



25X1

25X1

FIGURE 16. LAUNCH COMPLEX E(6), TYURATAM.

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release

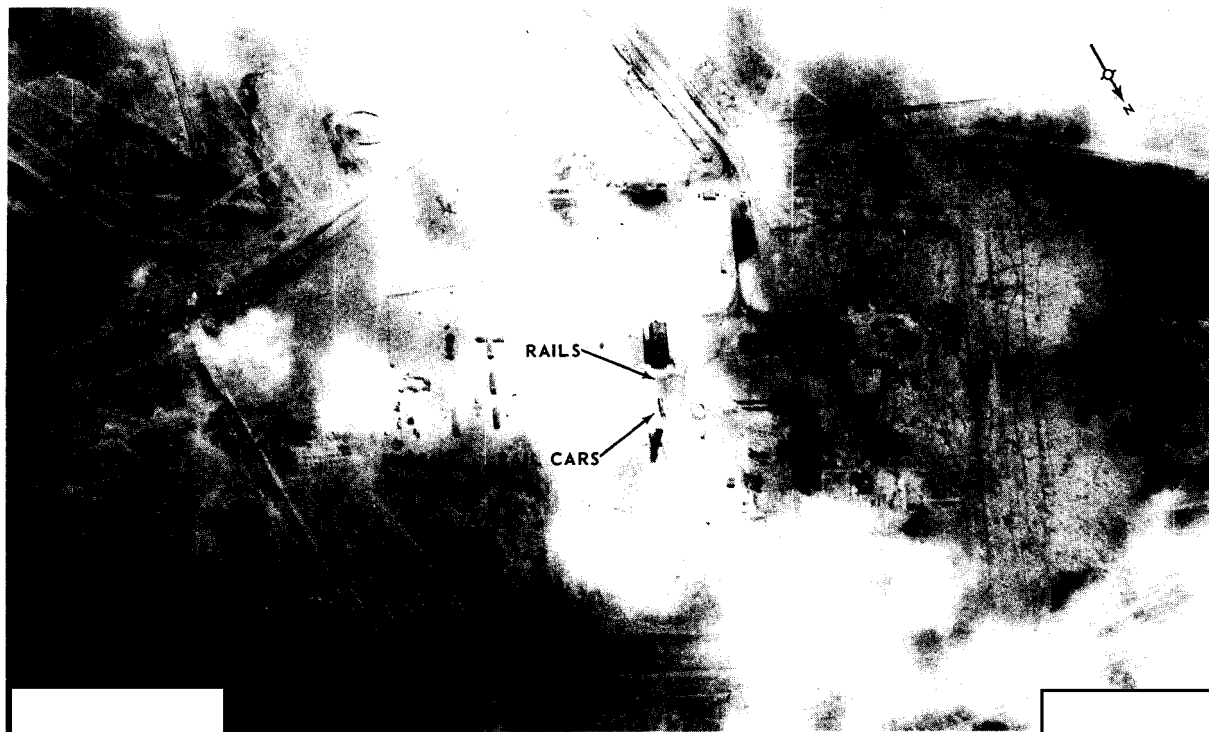
TOP SECRET

2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

300010014-1

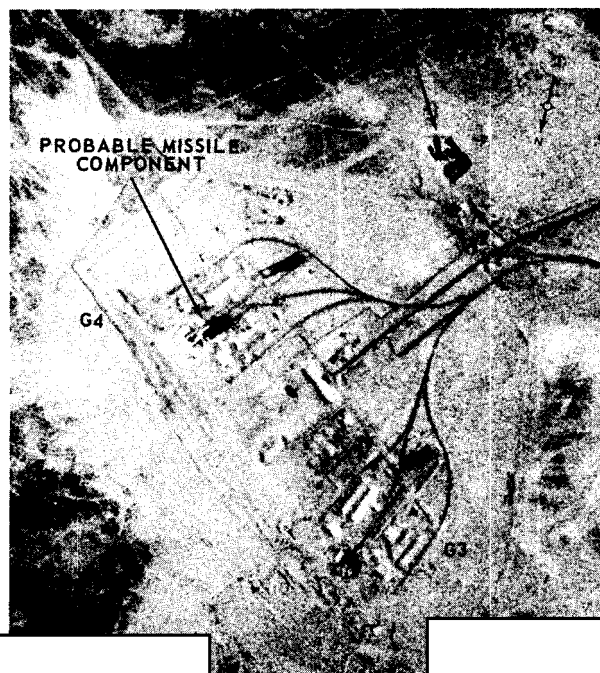
25X1



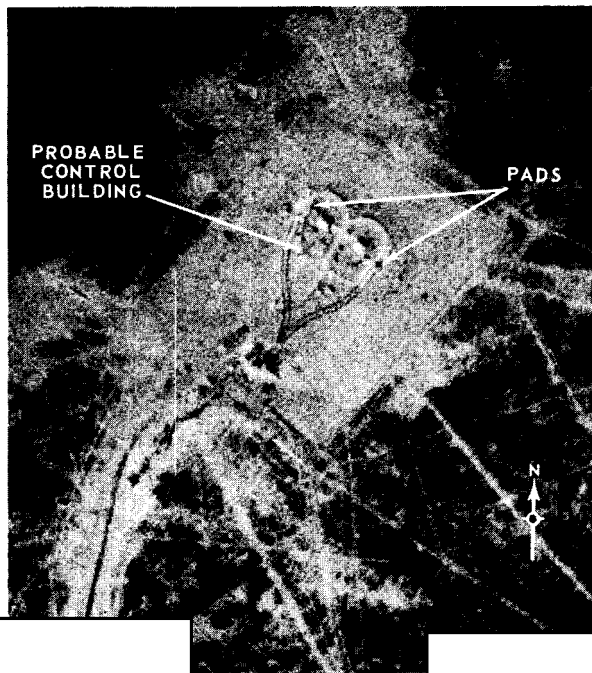
25X1

25X1

FIGURE 17. LAUNCH SITE G1/G2(7), TYURATAM.



25X1



25X1

FIGURE 18. LAUNCH SITE G3/G4(11), TYURATAM.

FIGURE 19. LAUNCH SITE G5/G6(12), TYURATAM.

25X1

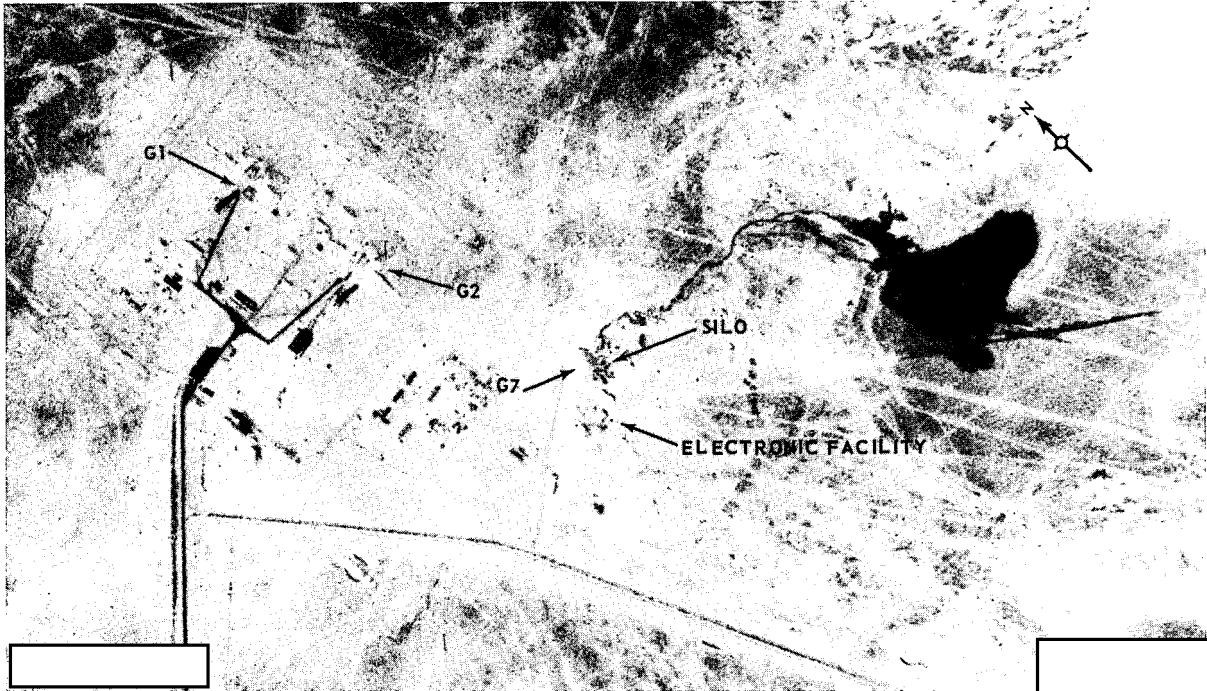
25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

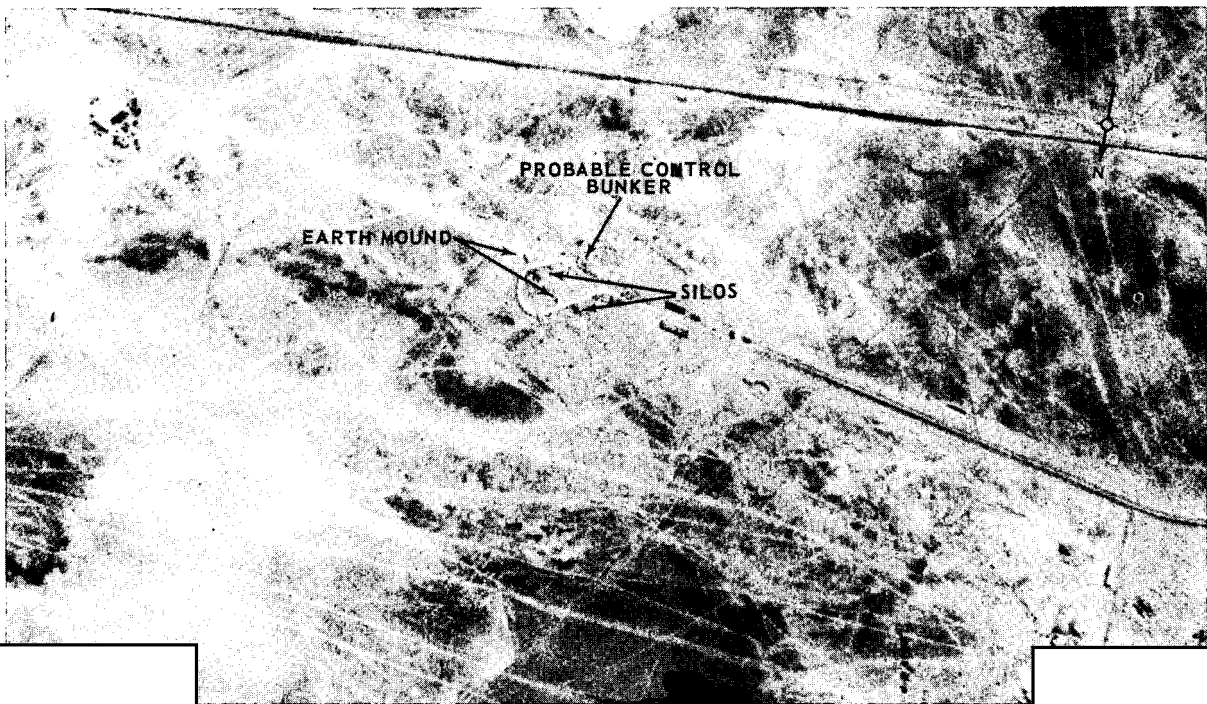
25X1



25X1

25X1

FIGURE 20. LAUNCH SITE G7(18), TYURATAM.



25X1

25X1

FIGURE 21. LAUNCH SITE G8/G9(19), TYURATAM.

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release

TOP SECRET 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1

25X1

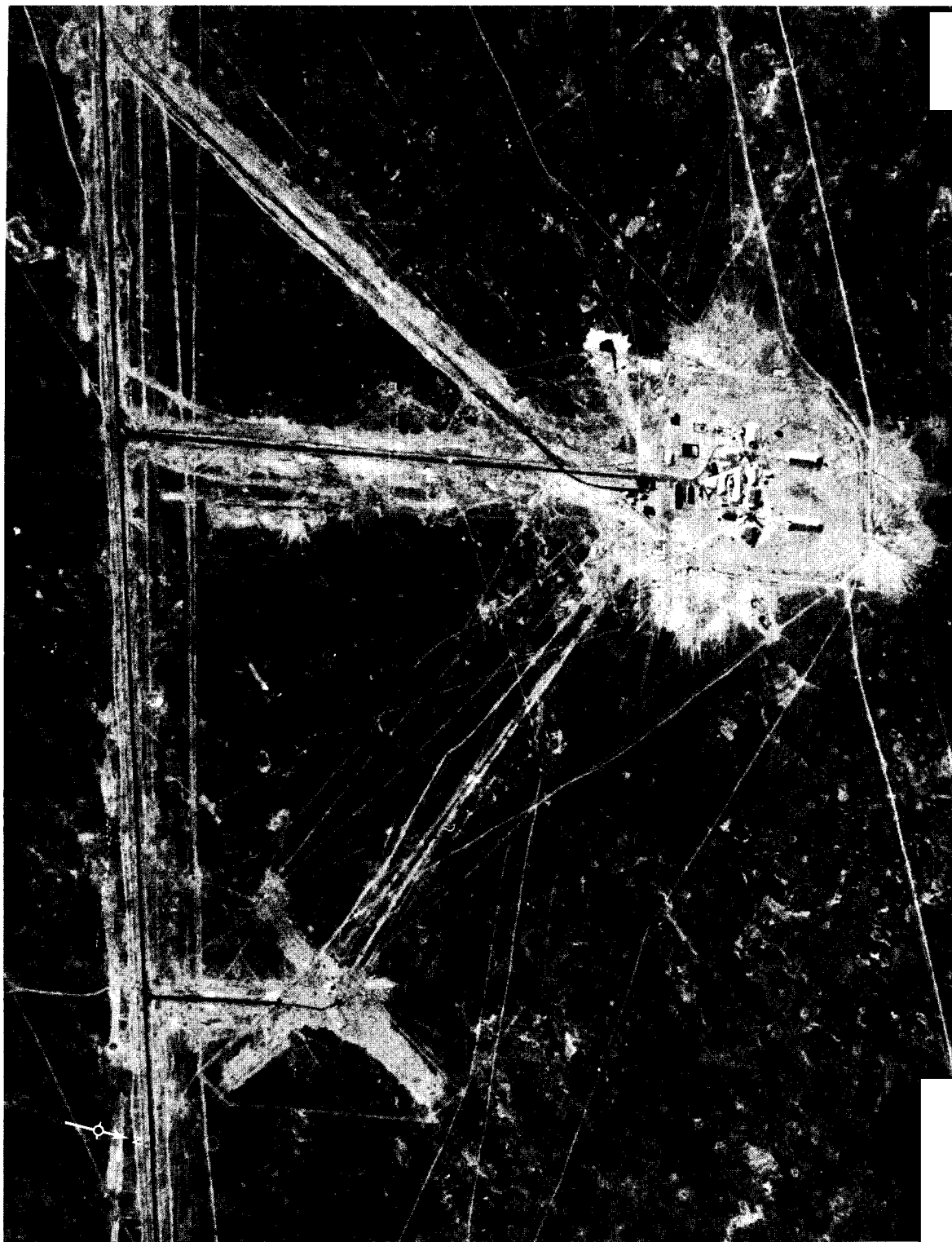


FIGURE 22. LAUNCH COMPLEX H(8), TYURATAM.

25X1

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1



25X1

FIGURE 23. LAUNCH COMPLEX I(14), TYURATAM.

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

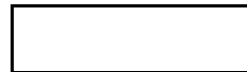
TOP SECRET

25X1

25X1



25X1



25X1

FIGURE 24. COMPLEX J, TYURATAM.

25X1

25X1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1



25X1

25X1

25X1

FIGURE 25. LAUNCH COMPLEX K(13), TYURATAM.

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

TOP SECRET

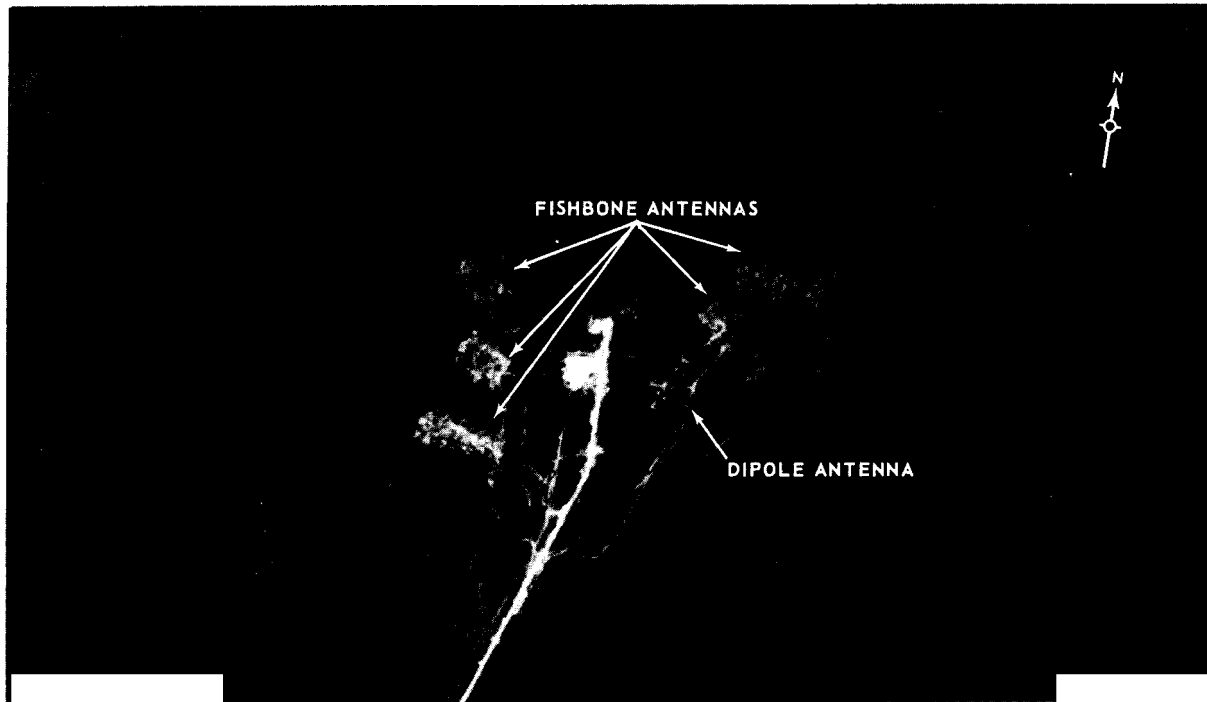


FIGURE 26. COMMUNICATIONS FACILITY, SVOBODNY.

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1

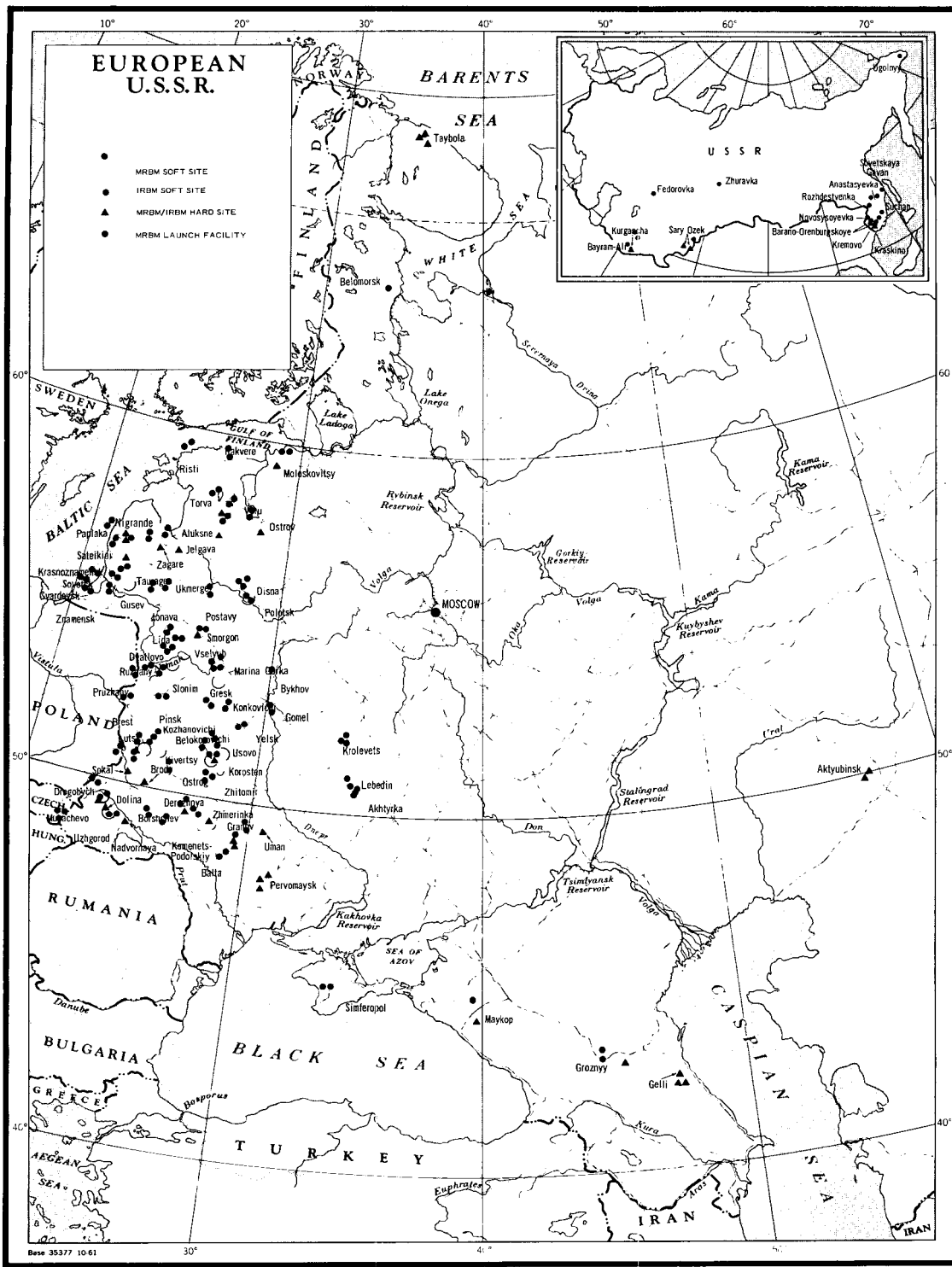


FIGURE 29. DEPLOYMENT OF SOVIET IRBM/MRBM COMPLEXES.

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

SOVIET IRBM/MRBM DEPLOYMENT

25X1

[] photography since our 14th Revision covers 12 of the 15 IRBM, and 54 of the 69 MRBM complexes. No new sites have been identified; one IRBM hard site has been abandoned, and we are dropping it from the inventory. See Figure 29 for locations of deployed IRBM/MRBM complexes. Typical configurations of the launch sites are shown in Figure 30. The composition of IRBM/MRBM complexes is given in Table 6.

IRBM DEPLOYMENT

The Soviet IRBM force currently consists of 36 sites containing a total of 124 launchers, including 60 in a hard configuration. Of these launchers, 115, including 51 hard, are operational. Since our 14th Revision 3 IRBM hard sites have been completed, leaving only 3 remaining under construction. Newly operational sites (Figure 31) are Kalnik (Granov Complex), Petrovskiy (Aktyubinsk Complex), and Novosysoyevka 2 (Novosysoyevka Complex). The Kalnik site was observed on []

25X1

25X1

25X1

[] Continued coverage of the Bolshaya Kamenka site at the Saratov Complex (see 14th Revision) reveals no activity or change in construction status, leading us to conclude that this site has been abandoned.

MRBM DEPLOYMENT

The Soviet MRBM force currently consists of 158 sites containing 632 launchers, including 84 in a hard configuration. All are operational. The last 2 sites to reach operational status, Redkino (Ostrov Complex) and Postavy 2 (Postavy Complex), were complete when observed on []

25X1

25X1

[] respectively (Figure 32).

KAPUSTIN YAR MISSILE TEST CENTER

Test Range Facilities

[] provided significant coverage of the Kapustin Yar Missile Test Center.

25X1

At Launch Complex A (Figure 33), the launch facilities show no apparent change since [] however, a probable missile exercise is underway on the southern pad. The missile appears to be erected and some vehicles are observed on the western edge of the pad. Poor image quality precludes identification of the missile and associated equipment. In the housing and support area, the large multistory building that was under construction on [] has been completed, and the foundation and part of the walk of another structure have been erected.

25X1

25X1

At Launch Area 1C (Figure 34), the 2 new pads are still under construction. The pads are approximately 90 feet square and a rail spur appears to terminate at the center of each. A new fenceline has been constructed to include the new pads. The rail-served launcher has been removed from the old launch pad.

At Launch Site 4C1, the prototype for deployed MRBM hard sites, significant new construction was observed (Figure 35). This activity is new since [] A new rail line, branching off the line serving Launch Area 1C, has been extended into the launch site. The railbed terminates in a fork just east of the western rear silo. A new square excavation, located approximately 200 feet south of the western rear silo, contains a row of 4 linear objects and a circular hole or revetment. A large structure is observed between the excavation and the site access road. The tall structure formerly positioned over the eastern forward silo has been moved north to the silo

25X1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

25X1

cover. A crane is discernible near the eastern rear silo. The sum of this activity suggests major modification to this launch site.

The rail-served probable missile assembly and checkout area located approximately 5.5 nautical miles northwest of Launch Complex C shows new activity (Figure 36). The western security fences have been extended since []

25X1

[] to include approximately 40 per cent more area. In the southwest section of this area there are 3 possible 175- by 55-foot drive-through buildings under construction. Approximately 1,500 feet north is another new building, measuring approximately 110 by 50 feet, which will probably be rail served. In the southern portion of the original area, a rail-served building measuring approximately 90 by 35 feet has been constructed since []

25X1

25X1

25X1

At Launch Complex E (Figure 37), new ground scarring is evident north of the pad and parallel to the southern loop access road since [] A new area of construction activity (Figure 38), approximately 2.5 nm north northeast of the complex, is reached by a continuation of the road serving Launch Complex E. There was no evidence of this new area or the service road on []

25X1

25X1

25X1

[] The new area is rectangular and measures approximately 735 by 620 feet. It is secured by a single fence and has 2 security buildings at the entrance. The fence is broken near the northern corner for access to a borrow pit. A raised structure approximately 35 feet square, near the center of the area, is surrounded by a loop road. A circular revetment is adjacent to the western side, and a linear revetment the eastern side, of the loop road. A bivouac/training area (Figure 39), new since [] [] is visible approximately 2 nm west of Launch Complex E. This area consists of 2 rectangular sections containing respectively,

25X1

25X1

a tent area and a motor pool.

Test Range Activity

Firing activity at Kapustin Yar during the period of [] showed a decrease in comparison with that reported in our last revision for the period []

25X1

25X1

25X1

SS-4 operations were conducted to the 1,020-nm impact area on []

25X1

[] Most, if not all 5, were probably operational/training type firings. All apparently were successful. One SS-5 firing to the 2,200-nm impact area was noted on []

25X1

25X1

In addition, flight testing of a probable new tactical missile system(s) continued, although at a reduced rate.

FIXED FIELD SITES

Since our last revision 16 additional fixed field sites have been identified on [] photography, bringing the total to 66 (Table 5). The newly identified sites have from 2 to 4 padlike clearings; distances from the nearest IRBM/MRBM complex vary from less than one to approximately 25 nm. This apparently is within the pattern previously observed.

25X1

These sites appear to fall into 2 general groups: those that were constructed prior to [] (about 25 percent of the total); and the larger majority which have been built since that time, indicating an acceleration of the pace of this program.

25X1

The purpose of these sites is still unclear. Field training for crews at first appeared to be a logical function, but the large number of sites appears to weaken this argument. We still believe that all sites probably do not serve the same purpose. Although some in the early group may actually represent the alternate/reserve positions referred to in []

25X1

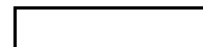
25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

TOP SECRET

25X1



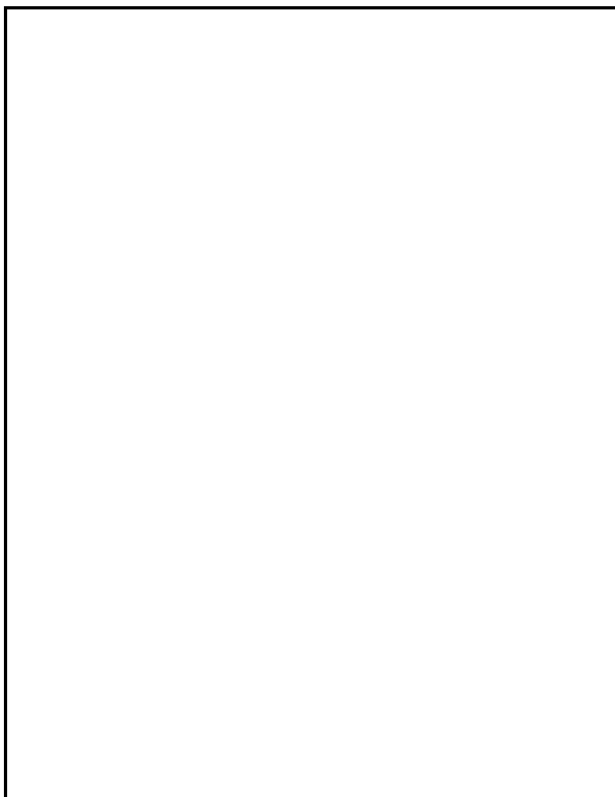
25X1

25X1

documents, others, because of their location near permanent sites, would make poor alternatives. Some of these older sites may represent early deployment of the SS-3 system. Another possibility we have examined is that the refire missiles available for soft MRBM launchers could be moved to the fixed field sites and fired in the initial salvo with missiles from the permanent sites. Our analysis, however, tends to eliminate this possibility, primarily because it would require an additional inventory of launch equipment at each soft site, and there is no evidence to support this. In fact, in 5 instances where field sites have been occupied, no erectors or other ground support equipment could be observed at the associated permanent site.

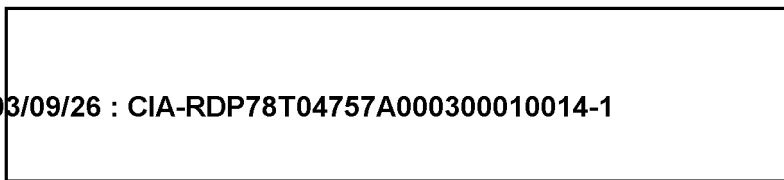
We continue to believe, however, that MRBM units are currently capable of moving to, and firing from, these fixed field positions.

25X1



25X1

TOP SECRET



25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

Next 1 Page(s) In Document Exempt

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

TOP SECRET
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1



25X1



25X1

25X1

FIGURE 33. LAUNCH COMPLEX A, KAPUSTIN YAR.

TOP SECRET
Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1

TOP SECRET

25X1

25X1

25X1

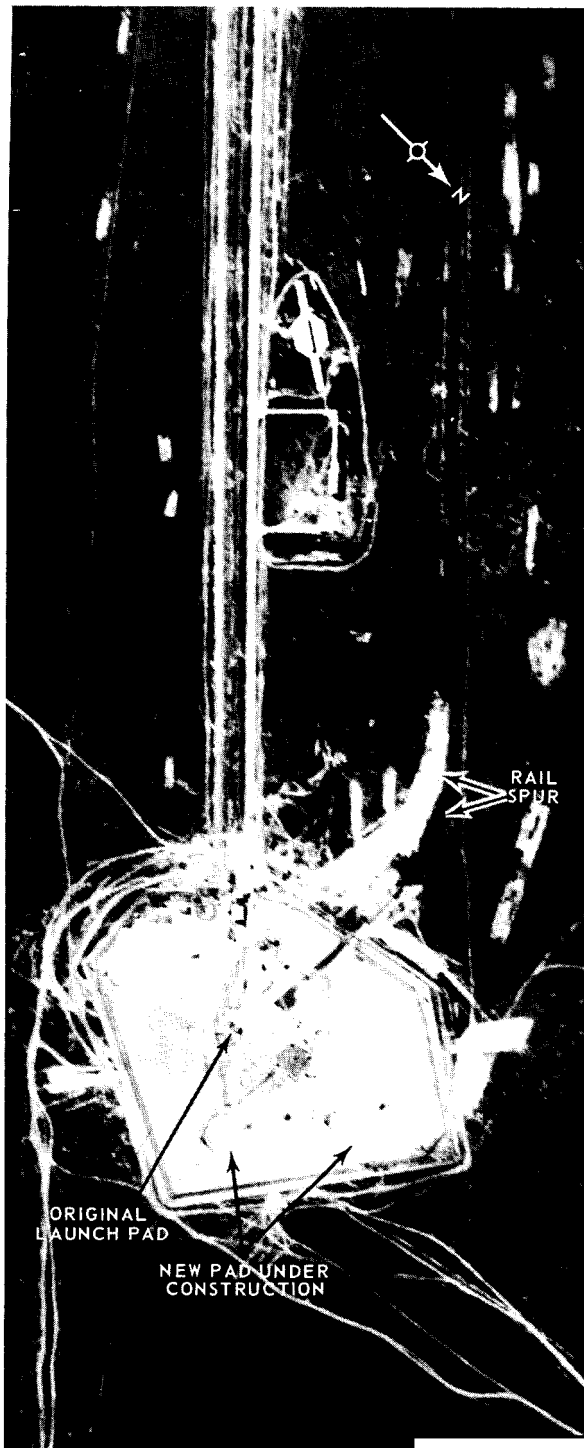


FIGURE 34. LAUNCH AREA 1C, KAPUSTIN YAR.

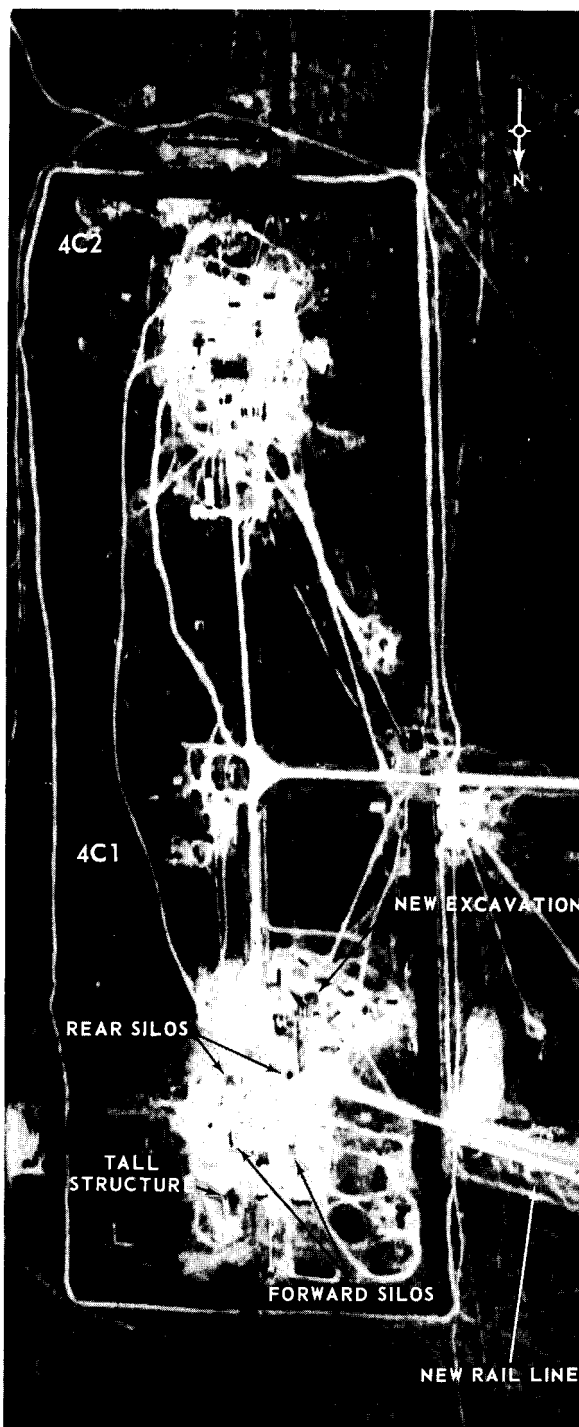


FIGURE 35. LAUNCH SITE 4C1, KAPUSTIN YAR.

25X1

25X1

25X1

25X1

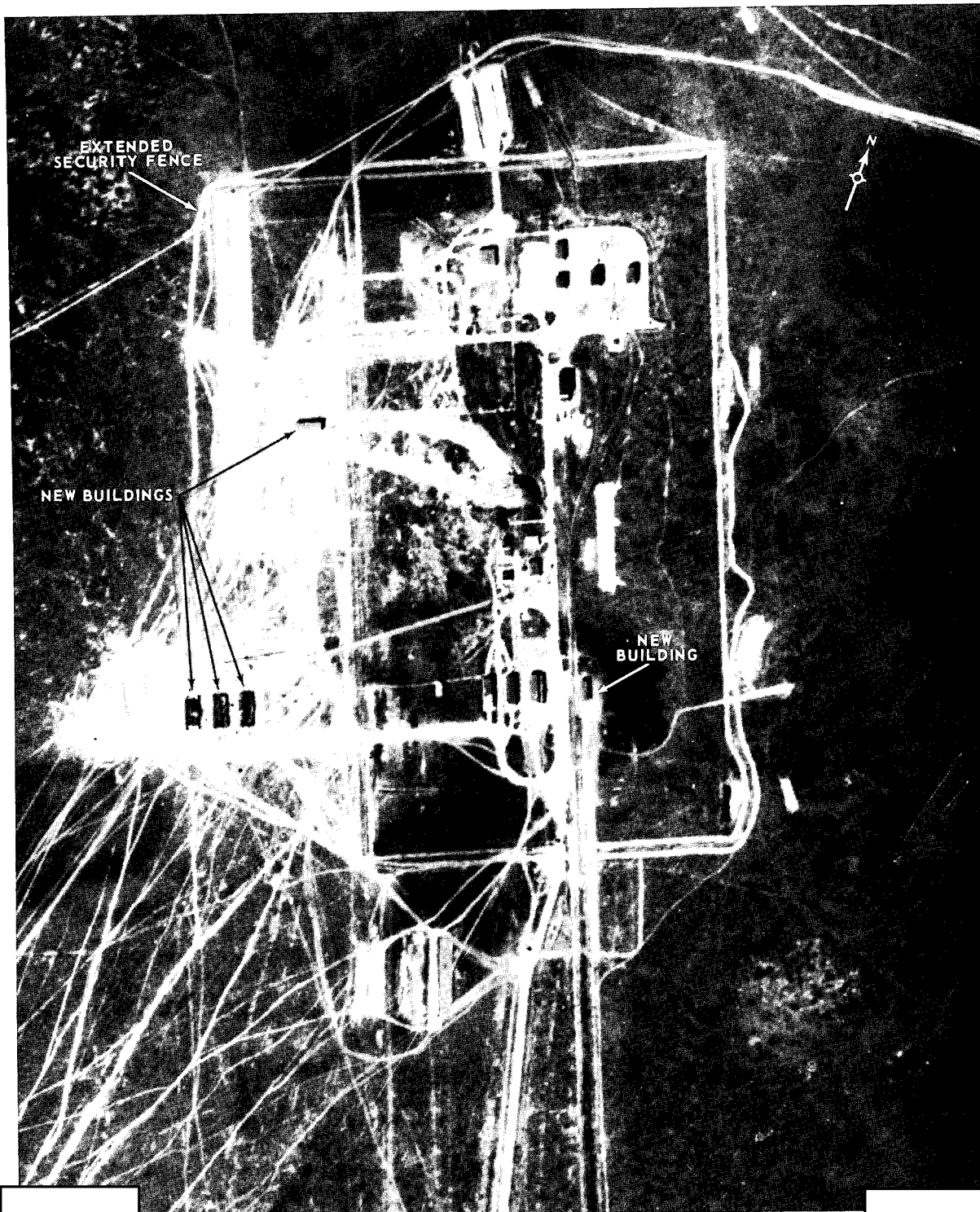
25X1

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

25X1



25X1

25X1

FIGURE 36. PROBABLE MISSILE ASSEMBLY AND CHECKOUT AREA NORTHWEST OF LAUNCH COMPLEX C, KAPUSTIN YAR.

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

25X1

25X1

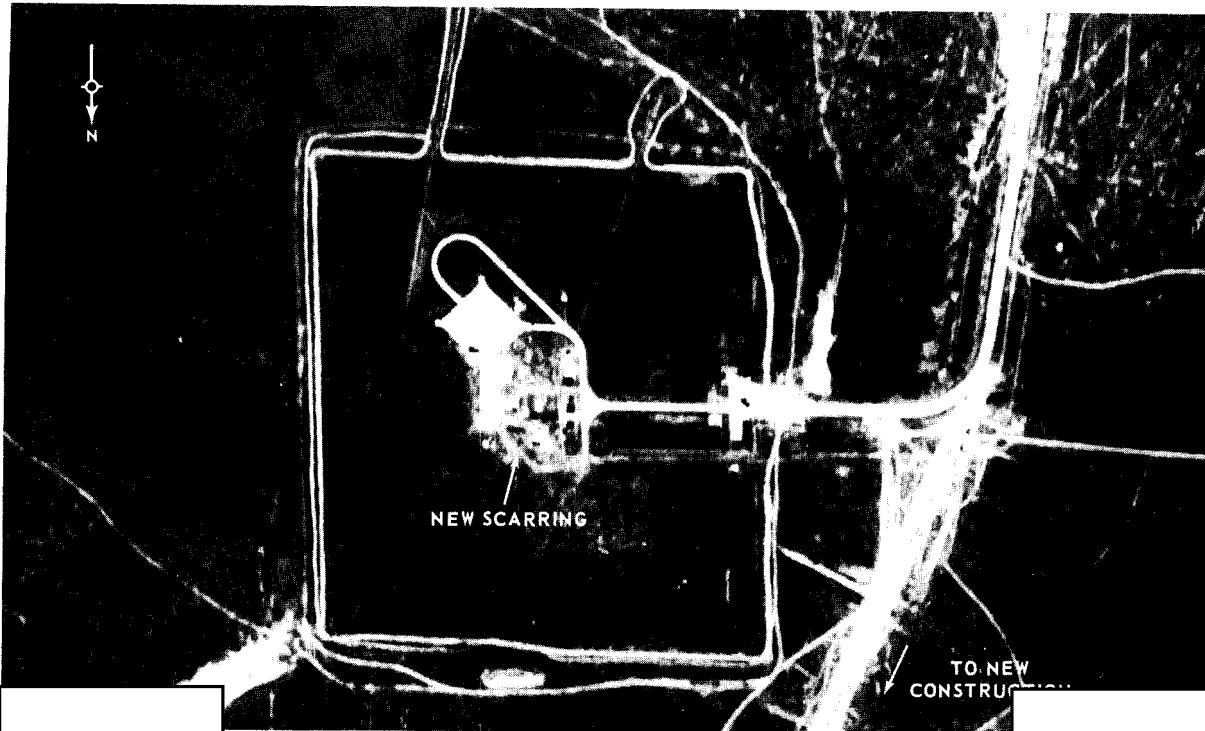


FIGURE 37. LAUNCH COMPLEX E, KAPUSTIN YAR.

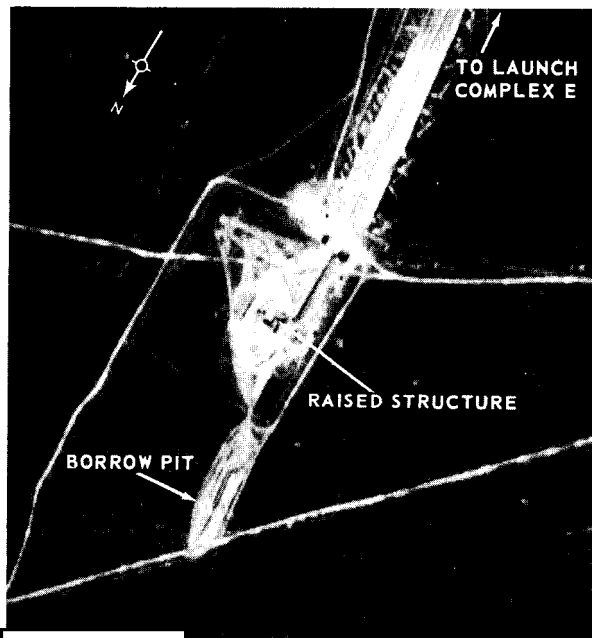


FIGURE 38. NEW CONSTRUCTION NORTH OF LAUNCH COMPLEX E, KAPUSTIN YAR.

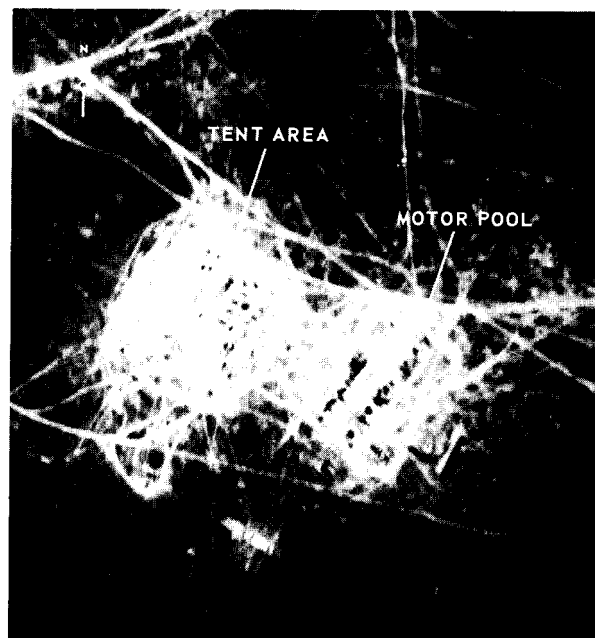


FIGURE 39. NEW DIVOUAC/TRAINING AREA WEST OF LAUNCH COMPLEX E, KAPUSTIN YAR.

TOP SECRET

25X1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

Approved For Release 2003/09/26 : CIA-RDP78T04757A000300010014-1

TOP SECRET

25X1

25X1

25X1

TABLE 1. SUMMARY OF ESTIMATED STATUS OF IDENTIFIED ICBM, IRBM, AND MRBM LAUNCHERS
AT DEPLOYED COMPLEXES*

Type	Sites	Launchers	Operational	U/C	Type	Sites	Launchers	Operational	U/C
ICBM					IRBM				
IA	3	4	4	0	III	16	64	64	0
IB	2	4	0	4	IV	20	60	51	9
IIA	5	10	10	0	TOTAL	36	124	115	9
IIB	29	58	58	0	MRBM				
IIC	7	14	14	0	I	84	336	336	0
IID	30	60	60	0	II	53	212	212	0
IIIA	25	75	42	33	IV	21	84	84	0
IIIB	3	9	9	0	TOTAL	158	632	632	0
III (Single)	30	35	0	35	GRAND				
TOTAL	134	269	197	72	TOTAL	194	756	747	9

*See Tables 2, 3, and 4 for details. Figures include 3 launch silos at Type III ICBM and Type IV IRBM sites, and 4 launch silos at Type IV MRBM sites.

25X1

TOP SECRET

25X1

TABLE 2. SUMMARY EVALUATION OF SOVIET ICBM DEPLOYMENT

Location*	BE Number	Coordinates	Type of Site	Number of Launchers		Site Negated		First Coverage		Latest Coverage		Stage of Const on Last Usable Coverage			Estimated Quarter Site Operational				Estimated Status
				Soft	Hard	Date	Msn	Date	Msn	Date	Msn	Date	Msn	Const	1st	2nd	3rd	4th	
ALEYSK																			
Site A(1)		52-27N 82-35E	III (Single)	1												65			U/C
Site B(2)		52-20N 82-40E	III (Single)	1													65		U/C
Site C(3)		52-33N 82-42E	III (Single)	1														65	U/C
Site D(4)		52-32N 82-34E	III (Single)	1													65		U/C
Site E(5)		52-35N 82-30E	III (Single)	1														65	U/C
Site F(6)		52-36N 82-36E	III (Single)	1															U/C
DOMBAROVSKIY																			
Site A(4)		51-11N 59-37E	III (Single)	1														65	U/C
Site B(3)		51-06N 59-35E	III (Single)	1														65	U/C
Site C(2)		51-01N 59-41E	III (Single)	1														65	U/C
Site D(1)		50-58N 59-32E	III (Single)	1														65	U/C
Site E(6) Probable		51-04N 59-28E	III (Single)	1														65	U/C
DROVYANAYA																			
Site A (1)		51-25N 113-00E	IIB	2												63			Operational
Site B (2)		51-25N 113-04E	IIIA	3												64			Operational
Site C (4)		51-28N 113-04E	IID	2														63	Operational
Site D (3)		51-20N 113-01E	IID	2												64			Operational
Site E (5)		51-25N 112-50E	IIIA	3													65		U/C
Site F (6)		51-20N 112-55E	IIIA	3													65		U/C
GLADKAYA																			
Site A (3)		56-20N 92-15E	IID	2															Operational
Site B (2)		56-25N 92-27E	IID	2												64			Operational
Site D (5)		56-20N 92-13E	IIIA	3													65		U/C
Site E (6)		56-26N 92-11E	IIIA	3														65	U/C
IMENI GASTELLO																			
Site A (1)		51-03N 66-06E	III(Single)	1														65	U/C
Site B (2)		51-06N 66-02E	III (Single)	1														65	U/C
Site C (3)		51-10N 66-06E	III (Single)	1														65	U/C
Site D (4)		51-07N 66-13E	III (Single)	1														65	U/C
Site E (6)		51-13N 66-13E	III (Single)	1														65	U/C
ITATKA																			
Site A (1)		56-59N 85-32E	IIB	2														62	Operational
Site B (2)		57-01N 85-39E	IIB	2												63			Operational
Site C (3)		56-54N 85-39E	IID	2														63	Operational
KARTALY																			
Site A (1) Probable		53-01N 60-26E	III (Single)	1														65	U/C
Site B (2) Probable		52-56N 60-31E	III (Single)	1														65	U/C
Site C Possible			III (Single)																
KOSTROMA																			
Site A (1)		58-02N 41-22E	IIB	2													62		Operational
Site B (2)		58-02N 41-07E	IIB	2													62		Operational
Site C (3)		57-59N 41-09E	IIB	2														62	Operational
Site D (4)		58-05N 41-40E	IIB	2															Operational
Site E (5)		57-58N 41-14E	IIIA	3												63			Operational
Site F (6)		57-55N 41-10E	IID	2														63	Operational
Site G (7)		58-08N 41-32E	IID	2												64			Operational
Site H (8)		58-04N 41-34E	IIIA	3														65	U/C
KOZELSK																			
Site A (3)		53-54N 35-45E	IIC	2														63	Operational
Site B (2)		53-45N 35-47E	IIC	2														63	Operational
Site D (4)		53-54N 35-51E	IIC	2															Operational
Site E (5)		53-51N 35-41E	IIB	3												64			Operational
Site F (6)		53-41N 35-39E	IIB	3														64	Operational

25X1

TOP SECRET

25X1

25X1

TABLE 2. (Continued)

Location*	BE Number	Coordinates	Type of Site	Number of Launchers		Site Negated		First Coverage		Latest Coverage		Stage of Const on Last Usable Coverage			Estimated Quarter Site Operational				Estimated Status
				Soft	Hard	Date	Msn	Date	Msn	Date	Msn	Date	Msn	Const	1st	2nd	3rd	4th	
NOVOSIBIRSK																			
Site A (2)		55-19N 83-10E	IIB	2															
Site B (1)		55-19N 83-02E	IIA		3										63				Operational
Site C (3)		55-28N 82-54E	IIA		3											63			Operational
Site D (1)		55-22N 83-14E	IID	2													64		Operational
Site E (3)		55-20N 82-36E	IID	2														63	Operational
OLYANNAYA																			
Site A (1)		50-34N 115-48E	IIA		3														Operational
Site B (2)		50-55N 115-45E	IIA		3														U/C
Site C (3)		51-01N 115-38E	IIA		3														U/C
Group D (4-10)		12-51-01N 116-06E	III (Single)		6 ¹													63	U/C
OMSK																			
Site A (1)		55-09N 73-38E	IIIB		3														Operational
PERM																			
Site A (1)		57-41N 56-11E	IIB	2															
Site B (2)		57-44N 55-55E	IIB	2															
Site C (3)		57-38N 56-07E	IIB	2															Operational
Site D (3)		57-42N 55-47E	IID	2															Operational
Site E (6)		57-45N 56-00E	IID	2															Operational
Site F (4)		57-41N 56-04E	IIA		3														Operational
PLESETSK																			
Site 1 (1)		62-56N 40-37E	IA	2															
Site 2 (2)		62-56N 40-32E	IA	1															
Site 3 (3)		62-56N 40-41E	IA	1															
Site A (4)		62-58N 40-47E	IIA	2															Operational
Site B (3)		62-03N 40-57E	IIB	2															Operational
Site C (6)		63-01N 40-33E	IIA		3														Operational
Site D (8)		62-54N 40-47E	IIC	2															Operational
Site E (7)		62-51N 40-35E	IIC	2															Operational
Site F 2'																			
Site G (9) Probable		62-53N 40-51E	IB	2															U/C
Site H (10) Probable		62-53N 40-52E	IB	2															U/C
SHADRINSK																			
Site A (1)		56-09N 63-51E	IIA		3														
Site B (2)		56-16N 64-02E	IIA		3														
Site C (3)		56-07N 63-57E	IIA		3														Operational
SVOBODNY																			
Site A (3)		51-55N 128-10E	IIB	2															
Site B (1)		51-49N 128-19E	IIB	2															
Site C (2)		51-53N 128-23E	IIB	2															Operational
Site D (4)		51-58N 128-07E	IID	2															Operational
Site E (6)		51-43N 128-00E	IID	2															Operational
Site F (5)		51-52N 128-13E	IID	2															Operational
Site G (7)		51-38N 127-56E	IIA		3														Operational
Site H (8)		52-03N 128-06E	IID	2															U/C
TEYKOVO																			
Site A (1)		56-55N 40-27E	IIB	2															
Site B (2)		56-56N 40-33E	IIB	2															Operational
Site C (3)		56-53N 40-17E	IIB	2															Operational
Site D (4)		56-59N 40-40E	IID	2															Operational
Site E (5)		56-49N 40-10E	IID	2															Operational
Site F (6)		56-55N 40-22E	IID	2															Operational
TYUMEN																			
Site A (3)		56-52N 65-34E	IIC	2															Operational
Site C (2)		56-51N 65-27E	IIC	2															Operational

25X1

TOP SECRET

25X1

25X1

TABLE 2. (Continued)

Location*	BE Number	Coordinates	Type of Site	Number of Launchers		Site Negated		First Coverage		Latest Coverage		Stage of Const on Last Usable Coverage			Estimated Quarter Site Operational				Estimated Status
				Soft	Hard	Date	Msn	Date	Msn	Date	Msn	Date	Msn	Const	1st	2nd	3rd	4th	
UZHUR																			
Site A (1)		55-20N 65-43E	III (Single)	1													65		U/C
Site B (2)		55-18N 69-38E	III (Single)	1												65			U/C
Site C (3)		55-20N 69-33E	III (Single)	1													65		U/C
Site D (4)		55-17N 69-26E	III (Single)	1														65	U/C
Site E (5)		55-13N 69-33E	III (Single)	1															U/C
Site F (6)		55-14N 69-40E	III (Single)	1															
VERKHNYAYA SALDA																			
Site A (2)		58-09N 60-16E	IIB	2												62			Operational
Site B (1)		58-06N 60-21E	IIA	2															Operational
Site C (3)		58-10N 60-28E	IIA	2												62			Operational
Site D (4)		58-12N 60-34E	IIB	2															Operational
Site E (5)		58-14N 60-55E	IIB	2															Operational
Site F (7)		58-14N 60-41E	IIIA	3												63			Operational
Site G (8)		58-13N 60-49E	IIIA	3													63		Operational
Site H (9)		58-05N 60-13E	IID	2														63	Operational
Site I (10)		58-09N 60-32E	IID	2															Operational
YEDROVO																			
Site A (2)		57-48N 33-36E	IIB	2														62	Operational
Site B (1)		57-48N 33-14E	IIB	2												64			Operational
Site C (5)		57-49N 33-08E	IID	2															Operational
Site D (4)		57-48N 33-28E	IID	2													63		Operational
Site E (8)		57-52N 33-18E	IIIA	3												63			Operational
Site F (6)		57-44N 33-06E	IID	2													63		Operational
Site G (7)		57-47N 33-02E	IID	2												64			Operational
Site I (3)		57-52N 33-27E	IIIA	3															Operational
YOSHKAR-OLA																			
Site A (1)		56-35N 48-09E	IIB	2													62		Operational
Site B (2)		56-35N 48-18E	IIB	2															Operational
Site C (3)		56-32N 48-27E	IIB	2												63			Operational
Site D (4)		56-31N 48-20E	IID	2															Operational
Site E (5)		56-34N 48-13E	IID	2															Operational
Site F (6)		56-36N 48-28E	IID	2												64			Operational
YURYA																			
Site A (2)		59-10N 49-32E	IIA	2															Operational
Site B (1)		59-09N 49-40E	IIA	2												62			Operational
Site C (3)		59-13N 49-23E	IIB	2													62		Operational
Site D (4)		59-16N 49-22E	IIB	2															Operational
Site E (5)		59-23N 49-17E	IIIA	3															Operational
Site F (7)		59-21N 49-14E	IIB	2												63			Operational
Site G (6)		59-04N 49-51E	IIIA	3												64			Operational
Site H (8)		59-11N 49-47E	IID	2															Operational
Site I (11)		59-21N 49-25E	IID	2												64			Operational
Site J (9)		59-06N 49-45E	IID	2															Operational
Site K (10)		59-13N 49-18E	IIIA	3															U/C
ZHANGIZ-TOBE																			
Site A (1) Probable		49-12N 81-00E	III (Single)	1												65			U/C
Site B (2) Probable		49-16N 80-59E	III (Single)	1													65		U/C
Site C (3)		49-11N 80-54E	III (Single)	1															U/C
Site D (4)		49-10N 81-04E	III (Single)	1															U/C
Site E (5)		49-06N 81-03E	III (Single)	1															U/C
Total Deployed			134	150	119														

25X1
25X1TOP SECRET
25X1

25X1

25X1

TABLE 2. (Continued)

Location*	BE Number	Coordinates	Type of Site	Number of Launchers		Site Negated		First Coverage		Latest Coverage		Stage of Const on Last Usable Coverage			Estimated Quarter Site Operational				Estimated Status
				Soft	Hard	Date	Msn	Date	Msn	Date	Msn	Date	Msn	Const	1st	2nd	3rd	4th	
TYURATAM																			
Complex A1 (1)		45-55N 63-31E	I	1															Operational
A2		45-55N 63-31E	I	1															Operational
A3 (15)		45-54N 63-30E	III (Single)	1	1														U/C
Complex B1 (2)		46-00N 63-34E	IA Prototype	1															Operational
B2 (16)		45-59N 63-33E	III (Single)	1	1														U/C
B3 (17)		46-00N 63-34E	II (Single)	1															U/C
Complex C1 (3)		45-48N 63-39E	II Prototype	1															Operational
C2		45-48N 63-39E	II	1															Operational
C3		45-48N 63-39E	II	1															Operational
Complex D1 (4)		45-59N 63-57E	IIIA Prototype	3															Operational
D2 (9)		45-59N 63-57E	III	3															Operational
Complex E1 (6)		45-58N 63-12E	IIC Prototype	1															U/C
E2		45-48N 63-12E	IIC	1															Operational
E3		45-48N 63-12E	IIC	1															Operational
Complex F (5)		46-02N 63-06E	IIIB Prototype	3															Operational
Complex G1/G2 (7)		46-03N 62-56E	I	2															Operational
G3/G4 (11)		46-03N 62-56E	I	2															U/C
G5/G6 (12)		46-03N 62-54E	II	2															U/C
G7 (18)		46-04N 62-56E	III (Single)	1															U/C
G8/G9 (19)		46-04N 62-57E	III	2															U/C
Complex H (8)		45-59N 63-42E	I	2															Operational
Complex I (14)		45-56N 63-26E	III (Single)	1															U/C
Complex J 2/																			
Complex K (13)		46-02N 63-03E	III	2															U/C
Total				18	17														

*TDI site designators are indicated in parentheses.

1/ DIA includes one additional probable site (silo).

2/ See Introduction, page 6.

3/ See Introduction, page 9.

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

TABLE 3. SUMMARY EVALUATION OF SOVIET IRBM DEPLOYMENT

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
AKTYUBINSK Launch Complex KARAKHOBDA PETROVSKIY		49-58-15N 56-51-15E 50-00-30N 56-58-00E	IV IV	3 3		Mid Complete
BAYRAM-ALI Launch Complex BAYRAM-ALI		37-45-45N 62-11-00E	III	4		Complete
BELOMORSK Launch Complex RAMOYE		64-25-45N 34-18-15E	III	4		Complete
FEDOROVKA Launch Complex TRAKTOVYY		53-25-15N 62-23-00E	III	4		Complete
GELLI Launch Complex KAKASHURA GELLI PARAUL		42-38-45N 47-27-00E 42-26-30N 47-28-30E 42-47-30N 47-23-00E	IV IV IV	3 3 3		Complete Complete Complete
GRANOV Launch Complex GRANOV 1 GRANOV 2 KALNIK		48-56-15N 29-30-15E 48-50-00N 29-28-45E 48-59-30N 29-21-45E	III IV IV	4 3 3		Complete Complete Complete
KROLEVETS Launch Complex KROLEVETS 1 KROLEVETS 2 BEREZA		51-36-45N 33-29-30E 51-40-45N 33-31-15E 51-43-45N 33-43-45E	III III III	4 4 4		Complete Complete Complete
LEBEDIN Launch Complex LEBEDIN 1 LEBEDIN 2 LEBEDIN 2		50-33-00N 34-25-45E 50-35-45N 34-24-30E 50-38-00N 34-27-30E	III III III	4 4 4		Complete Complete Complete
NIGRANDE Launch Complex NIGRANDE SKRUNDA VAINODE		56-31-00N 22-02-15E 56-35-30N 21-49-15E 56-28-30N 21-50-15E	III IV IV	4 3 3		Complete Complete Complete
NOVOSYSOYEVKA Launch Complex NOVOSYSOYEVKA 1 NOVOSYSOYEVKA 2 NOVOSYSOYEVKA 3		44-11-45N 133-26-15E 44-07-15N 133-28-30E 44-07-30N 133-23-45E	III IV IV	4 3 3		Complete Complete Early
PERVOMAYSK Launch Complex KAMENNYI MOST SEME NOVKA 1 SEME NOVKA 2		47-58-00N 30-53-15E 47-58-45N 30-59-00E 47-53-30N 30-58-45E	IV IV IV	3 3 3		Complete Complete Complete

25X1

25X1

TOP SECRET

25X1

25X1

TABLE 3. (Continued)

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
SARY OZEK Launch Complex		44-32-00N 77-46-15E	III	4		Complete
KARA BABAU 1		44-31-00N 77-58-45E	IV	3		Complete
KARA BABAU 2		44-30-15N 77-41-15E	IV	3		Complete
KARA BABAU 3						
SMORGON Launch Complex						
SMORGON 1		54-31-45N 26-17-30E	III	4		Complete
SMORGON 2		54-26-00N 26-18-30E	IV	3		Complete
SMORGON 3		54-36-15N 26-22-30E	III	4		Complete
TAYBOLA Launch Complex						
TAYBOLA 1		68-28-00N 33-15-30E	IV	3		Complete
TAYBOLA 2		68-30-30N 33-23-15E	IV	3		Complete
TAYBOLA 3		68-26-00N 33-29-15E	IV	3		Mid
ZHURAVKA Launch Complex						
ZHURAVKA		54-36-30N 76-39-45E	III	4		Complete

*TDI site designators have been adopted for IRBM Launch Sites.

25X1

TOP SECRET

25X1

25X1

25X1

25X1

TOP SECRET

25X1

25X1

25X1

TABLE 4. SUMMARY EVALUATION OF SOVIET MRBM DEPLOYMENT

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
AKHTYRKA Launch Complex						
AKHTYRKA 1		50-16-00N 34-50-15E	II	4		Complete
AKHTYRKA 2		50-22-00N 34-57-00E	II	4		Complete
ALUKSNE Launch Complex						
LEJASCIEMS 1		57-21-00N 26-44-45E	II	4		Complete
RUSKI		57-25-15N 26-50-00E	II	4		Complete
LEJASCIEMS 2		57-13-00N 26-33-30E	IV	4		Complete
ANASTASYEVKA Launch Complex						
ANASTASYEVKA 1		48-34-15N 135-37-45E	II	4		Complete
ANASTASYEVKA 2		48-35-45N 135-41-00E	II	4		Complete
BALTA Launch Complex						
BALTA 1		48-01-45N 29-34-00E	II	4		Complete
BALTA 2		48-07-00N 29-34-30E	II	4		Complete
BARANO-ORENBURGSKOYE Launch Complex						
SOFIYE ALEKSEYEVSKOYE		44-16-15N 131-22-30E	I	4		Complete
BARANO-ORENBURGSKOYE		44-19-45N 131-30-45E	I	4		Complete
BELOKOROVICHI Launch Complex						
OLEVSK 1		51-08-45N 28-03-15E	I	4		Complete
OLEVSK 2		51-10-30N 27-59-30E	I	4		Complete
RUDNYA ZLOTINSKAYA		51-03-30N 28-07-30E	IV	4		Complete
BORSHCHEV Launch Complex						
SKALA PODOLSKAYA 1		48-51-00N 26-08-30E	I	4		Complete
SKALA PODOLSKAYA 2		48-52-45N 26-03-30E	I	4		Complete
BREST Launch Complex						
BREST 1		51-48-45N 24-00-45E	II	4		Complete
BREST 2		51-51-45N 24-01-45E	II	4		Complete
BRODY Launch Complex						
BRODY 1		50-06-00N 25-12-15E	IV	4		Complete
BRODY 2		50-12-46N 25-05-00E	I	4		Complete
BERESTECHKO		50-20-00N 25-05-30E	I	4		Complete
BYKHOV Launch Complex						
SLEDYUKI		53-41-30N 30-20-30E	II	4		Complete
DERAZHNYA Launch Complex						
DERAZHNYA 1		49-21-00N 27-26-30E	II	4		Complete
DERAZHNYA 2		49-26-15N 27-29-00E	II	4		Complete
KHMELNITSKIY		49-24-45N 27-08-45E	IV	4		Complete

25X1

25X1

TOP SECRET

25X1

25X1

TABLE 4. (Continued)

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
DISNA Launch Complex						
DISNA		55-35-15N 28-16-00E	I	4		Complete
ZELKI		55-35-45N 28-24-30E	I	4		Complete
BORKOVICHI		55-41-45N 28-27-00E	II	4		Complete
DOLINA Launch Complex						
DOLINA 1		49-03-30N 24-03-30E	I	4		Complete
DOLINA 2		49-06-15N 24-08-30E	I	4		Complete
BOLEKHOV		49-06-45N 23-51-15E	IV	4		Complete
DROGOBYCH Launch Complex						
MEDENITSA		49-22-15N 23-45-30E	I	4		Complete
DROGOBYCH		49-25-30N 23-34-45E	I	4		Complete
STRYY		49-16-45N 23-43-00E	IV	4		Complete
DYATLOVO Launch Complex						
DYATLOVO		53-32-45N 25-16-45E	I	4		Complete
BEREZOVKA		53-35-30N 25-17-30E	I	4		Complete
ZBLYANY		53-35-45N 25-27-30E	II	4		Complete
GOMEL Launch Complex						
BORKHOV 1		52-18-30N 30-42-45E	II	4		Complete
BORKHOV 2		52-24-45N 30-39-00E	II	4		Complete
GRESK Launch Complex						
GRESK 1		53-14-15N 27-42-30E	I	4		Complete
GRESK 2		53-17-00N 27-40-45E	I	4		Complete
URECHYE		53-11-00N 27-58-30E	II	4		Complete
GROZNY Launch Complex						
SUNZHENSKOYE		43-08-15N 44-54-15E	I	4		Complete
NESTEROVSKAYA		43-11-30N 44-57-00E	I	4		Complete
ACHKHUY-MARTAN		43-10-30N 45-10-30E	IV	4		Complete
GUSEV Launch Complex						
GUSEV 1		54-41-30N 22-05-00E	I	4		Complete
GUSEV 2		54-44-00N 22-03-30E	I	4		Complete
GVARDEYSK Launch Complex						
GVARDEYSK 1		54-40-30N 21-07-30E	I	4		Complete
GVARDEYSK 2		54-45-15N 21-09-15E	I	4		Complete
JELGAVA Launch Complex						
IECAVA 1		56-35-30N 24-04-00E	II	4		Complete
IECAVA 2		56-39-45N 24-07-30E	II	4		Complete
IECAVA 3		56-33-00N 24-20-30E	IV	4		Complete

25X1

TABLE 4. (Continued)

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS	
JONAVA Launch Complex		54-57-15N 24-05-45E	II	4		Complete	
KARMEJAVA		55-01-00N 24-14-15E	II	4		Complete	
JONAVA							
KAMENETS-PODOLSKIY Launch Complex		48-51-15N 26-42-30E	II	4		Complete	
KAMENETS-PODOLSKIY		48-55-15N 26-59-00E	II	4		Complete	
DUNAYEVTSY							
KIVERTSY Launch Complex		50-53-15N 25-31-00E	I	4		Complete	
KIVERTSY 1		50-56-00N 25-36-15E	I	4		Complete	
KIVERTSY 2		50-58-30N 25-39-30E	II	4		Complete	
TROSTYANETS							
KONKOVICHI Launch Complex		52-10-30N 28-34-45E	I	4		Complete	
PETRIKOV		52-15-30N 28-37-45E	I	4		Complete	
KONKOVICHI							
KOROSTEN Launch Complex		50-51-45N 28-18-15E	II	4		Complete	
KOROSTEN 1		50-52-15N 28-31-00E	II	4		Complete	
KOROSTEN 2							
KOZHANOVICHI Launch Complex		52-10-15N 27-51-30E	I	4		Complete	
KOZHANOVICHI 1		52-11-30N 27-48-00E	I	4		Complete	
KOZHANOVICHI 2							
KRASKINO Launch Complex		42-44-00N 130-40-15E	II	4		Complete	
KRASKINO							
KRASNOZNAMENSK Launch Complex		55-01-30N 22-23-00E	I	4		Complete	
VIESVILLE		55-01-15N 22-11-15E	I	4		Complete	
RAGNIT							
KREMOVO Launch Complex		44-01-24N 132-20-39E	I	4		Complete	
KREMOVO		44-02-30N 132-26-26E	I	4		Complete	
LYALICHI							
KURGANCHA Launch Complex		39-37-45N 65-57-30E	I	4		Complete	
KURGANCHA 1		39-37-30N 65-57-00E	I	4		Complete	
KURGANCHA 2		39-35-15N 65-42-45E	IV	4		Complete	
TYM							

25X1

25X1

TOP SECRET

25X1

TABLE 4. (Continued)

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
LIDA Launch Complex						
LIDA 1		53-47-30N 25-20-30E	I	4		Complete
LIDA 2		53-57-15N 25-27-45E	I	4		Complete
LUTSK Launch Complex						
LUTSK 1		50-46-45N 25-03-00E	I	4		Complete
LUTSK 2		50-50-30N 25-04-15E	I	4		Complete
VLADIMIR-VOLYNSKIY		50-48-30N 24-42-30E	IV	4		Complete
MARINA GORKA Launch Complex						
MARINA GORKA		53-26-30N 27-45-30E	II	4		Complete
MAYKOP Launch Complex						
KURDZHIPSKAYA		44-31-45N 40-00-45E	II	4		Complete
SHIRVANSKAYA		44-25-30N 39-54-00E	IV	4		Complete
MOLOSKOVITSY Launch Complex						
MOLOSKOVITSY 1		59-28-45N 29-06-00E	II	4		Complete
MOLOSKOVITSY 2		59-29-30N 29-12-15E	II	4		Complete
GURLEVO		59-25-00N 28-53-15E	IV	4		Complete
MUKACHEVO Launch Complex						
MUKACHEVO 1		48-18-45N 22-30-45E	I	4		Complete
MUKACHEVO 2		48-19-30N 22-37-15E	I	4		Complete
NADVORNAYA Launch Complex						
PARYSHCHE		48-37-45N 24-42-00E	I	4		Complete
NOVA VES		48-39-30N 24-48-15E	I	4		Complete
OTYNYA		48-47-30N 24-50-30E	IV	4		Complete
OSTROG Launch Complex						
OSTROG 1		50-14-00N 26-43-15E	I	4		Complete
OSTROG 2		50-17-15N 26-41-00E	I	4		Complete
OSTROV Launch Complex						
ASANOVSHCHINA		57-31-45N 28-12-15E	I	4		Complete
SHEVELEVO		57-37-00N 28-12-15E	I	4		Complete
REDKINO		57-24-30N 28-26-00E	IV	4		Complete
PAPLAKA Launch Complex						
PAPLAKA 1		56-24-00N 21-17-30E	I	4		Complete
PAPLAKA 2		56-25-00N 21-16-45E	I	4		Complete
PINSK Launch Complex						
IVANOVO		52-10-45N 25-41-15E	I	4		Complete
MOTOL		52-12-30N 25-44-30E	I	4		Complete

25X1

25X1

TOP SECRET

25X1

TOP SECRET

25X1

25X1

25X1

TABLE 4. (Continued)

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
POLOTSK Launch Complex						
POLOTSK 1		55-22-30N 28-44-30E	II	4		Complete
POLOTSK 2		55-24-15N 28-33-45E	II	4		Complete
POSTAVY Launch Complex						
POSTAVY 1		55-09-45N 26-53-45E	II	4		Complete
KOZYANY		55-20-30N 26-51-30E	II	4		Complete
POSTAVY 2		55-06-15N 27-00-15E	IV	4		Complete
PRUZZHANY Launch Complex						
PRUZZHANY 1		52-30-30N 24-08-45E	II	4		Complete
PRUZZHANY 2		52-33-30N 24-06-15E	II	4		Complete
RAKVERE Launch Complex						
SIMUNA		59-08-45N 26-26-45E	II	4		Complete
VAIKE MAARJA		59-11-15N 26-20-45E	II	4		Complete
RISTI Launch Complex						
RISTI 1		59-04-00N 24-04-30E	I	4		Complete
RISTI 2		59-07-45N 24-06-45E	I	4		Complete
ROZHDESTVENKA Launch Complex						
ROZHDESTVENKA		45-47-15N 133-43-30E	II	4		Complete
RUZHANY Launch Complex						
KRUPA 1		52-47-45N 24-42-30E	II	4		Complete
KRUPA 2		52-49-15N 24-45-30E	II	4		Complete
SATEIKIAI Launch Complex						
SALANTAI 1		55-59-45N 21-38-15E	I	4		Complete
SALANTAI 2		56-02-15N 21-41-30E	I	4		Complete
ZEMAICIU KALVARIJA		56-01-45N 21-54-30E	IV	4		Complete
SIMFEROPOL Launch Complex						
MAZANKA		44-53-45N 34-20-00E	I	4		Complete
VALKI		44-57-00N 34-26-00E	I	4		Complete
SLONIM Launch Complex						
BYTEN 1		52-52-30N 25-21-30E	I	4		Complete
BYTEN 2		52-55-45N 25-22-15E	I	4		Complete
SOKAL Launch Complex						
SOKAL 1		50-22-45N 24-18-15E	I	4		Complete
SOKAL 2		50-27-15N 24-20-00E	I	4		Complete
SOKAL 3		50-20-15N 24-26-15E	IV	4		Complete

TABLE 4. (Continued)

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
SOVETSK Launch Complex SLAVSK 1 SLAVSK 2		54-59-15N 21-36-30E 54-59-45N 21-28-30E	I I	4 4		Complete Complete
SUCHAN Launch Complex NOVITSKOYE SEVERNYY SUCHAN		43-01-45N 133-17-00E 43-10-00N 133-20-05E	I I	4 4		Complete Complete
TAURAGE Launch Complex TAURAGE 1 TAURAGE 3		55-10-15N 22-20-30E 55-05-00N 22-20-00E	I I	4 4		Complete Complete
TORVA Launch Complex TORVA 1 TORVA 2 TSIRGULIINA		57-56-00N 26-04-00E 57-59-15N 26-05-00E 57-49-45N 26-12-30E	I I IV	4 4 4		Complete Complete Complete
UGOLNYY Launch Complex UGOLNYY		64-47-32N 177-56-15E	II	4		Complete
UKMERGE Launch Complex VEPRIAI UKMERGE		55-07-45N 24-38-30E 55-11-00N 24-42-30E	I I	4 4		Complete Complete
UMAN Launch Complex MOLODETSKOYE MANKOVKA KISHENTSY		48-53-45N 30-27-45E 48-57-45N 30-23-45E 49-00-15N 30-13-45E	I I IV	4 4 4		Complete Complete Complete
USOVO Launch Complex OVRUCH 1 OVRUCH 2 LIPNIKI		51-17-15N 28-16-15E 51-18-30N 28-10-30E 51-12-15N 28-26-30E	I I II	4 4 4		Complete Complete Complete
UZHGOROD Launch Complex UZHGOROD		48-33-30N 22-13-15E	II	4		Complete
VORU Launch Complex VORU 1 VORU 2		57-46-00N 26-47-15E 57-49-00N 26-50-30E	II II	4 4		Complete Complete
VSELYUB Launch Complex VSELYUB 1 VSELYUB 2		53-45-45N 25-43-00E 53-48-00N 25-46-45E	I I	4 4		Complete Complete
YELSK Launch Complex YELSK 1 YELSK 2		51-42-30N 29-12-30E 51-47-15N 29-18-15E	I I	4 4		Complete Complete

25X1

TABLE 4. (Continued)

LOCATION*	BE NUMBER	COORDINATES	TYPE	NO OF PADS/ LAUNCHERS	DATE OF LATEST PHOTOGRAPHY	ESTIMATED CONSTR STATUS
ZAGARE Launch Complex		56-23-15N 23-19-15E	I	4		Complete
ZAGARE 1		56-29-00N 23-20-45E	I	4		Complete
ZAGARE 2		56-24-30N 23-36-45E	IV	4		Complete
LIELELEJA						
ZHITOMIR Launch Complex		50-04-45N 28-15-45E	II	4		Complete
ZHITOMIR 1		50-10-00N 28-16-15E	II	4		Complete
ZHITOMIR 2		50-05-30N 28-22-00E	II	4		Complete
BERDICHEV						
ZHMERINKA Launch Complex		49-09-00N 28-11-45E	II	4		Complete
GNIVAN		49-10-15N 28-05-00E	II	4		Complete
ZHMERINKA		49-17-30N 28-20-15E	IV	4		Complete
VINNITSA						
ZNAMENSK Launch Complex		54-32-45N 21-11-15E	I	4		Complete
ZNAMENSK 1		54-35-15N 21-07-30E	I	4		Complete
ZNAMENSK 2						

*TDI site designators have been adopted for MRBM Launch Sites.

25X1

25X1

TOP SECRET

25X1

25X1

TABLE 5. SUMMARY EVALUATION OF SOVIET FIXED FIELD SITES (SSM FIXED FIELD POSITIONS)

LOCATION*	BE NUMBER	COORDINATES	NEGATION DATE	FIRST OBSERVED	NO OF PADLIKE CLEARINGS
ALUKSNE Lejasciems		57-15-15N 26-41-15E			4
ANASTASYEVKA Anastasyevka		48-32-15N 135-31-45E			4
BELOKOROVICHI Rudnya Zlotinskaya		51-08-30N 27-59-45E			3
BREST Pishcha		51-35-15N 23-46-45E			3
BRODY Yazlovchik Stanislavchik		50-05-45N 25-02-00E 50-07-00N 24-56-30E			4 4
DERAZHNYA Khmelnitskiy Letichev 1 Letichev 2		49-25-00N 27-06-30E 49-22-45N 27-43-45E 49-25-15N 27-45-00E			2 4 2
DISNA Devnovichi		55-47-45N 28-20-00E			4
DOLINA Berezhnitsa		49-12-45N 23-57-30E			4
DYATLOVO Ruda Yavorskaya 1 Ruda Yavorskaya 2 Ruda Yavorskaya 3		53-23-15N 25-10-30E 53-23-15N 25-12-45E 53-23-15N 25-13-30E			4 5 4
GOMEL Gomel		52-20-45N 30-51-30E			4
GUSEV Tolmingkensk		54-22-15N 22-20-15E			4
GVARDEYSK Geroysskoye Vysokoye		54-45-45N 21-25-15E 54-44-30N 21-33-45E			2 4

25X1

TABLE 5. (Continued)

LOCATION*	BE NUMBER	COORDINATES	NEGATION DATE	FIRST OBSERVED	NO OF PADLIKE CLEARINGS
JELGAVA					
Jelgava 1		56-38-45N 23-52-45E			2
Jelgava 2		56-44-15N 23-55-15E			4
JONAVA					
Kaisiadorys		54-59-30N 24-29-00E			4
KAMENETS-PODOLSKIY					
Yarmolintsy		49-12-00N 26-46-45E			4
KIVERTSY					
Kivertsy		50-50-00N 25-25-00E			4
KONKOVICHI					
Novoselki 1		52-23-00N 28-42-45E			4
Novoselki 2		52-25-45N 28-41-00E			4
KOROSTEN					
Litki 1		51-01-30N 28-27-45E			4
Yemilchino		50-52-30N 27-53-00E			4
Litki 2		51-01-15N 28-24-15E			2
KRASNOZNAMENSK					
Krasnoznamenask		54-57-30N 22-35-00E			4
Sudargas		55-00-30N 22-35-00E			4
LIDA					
Vasilishki		53-44-00N 24-56-15E			4
LUTSK					
Gorokhov		50-35-45N 24-48-45E			4
MARINA GORKA					
Shotsk		53-27-45N 27-48-00E			4
MAYKOP					
Tulskaya		49-31-15N 40-14-15E			4
Maykop		44-32-30N 39-57-45E			3
NADVORNAYA					
Ivanovtsy		48-38-00N 24-54-15E			4
OSTROG					
Slavuta		50-16-45N 26-57-45E			2
Shepetovka		50-12-30N 26-59-00E			4

TABLE 5. (Continued)

LOCATION*	BE NUMBER	COORDINATES	NEGATION DATE	FIRST OBSERVED	NO OF PADLIKE CLEARINGS
OSTROV Shabany		57-23-45N 28-13-15E			4
PINSK Lychkovtsy		52-15-00N 25-21-45E			4
POLOTSK Plissa 1		55-12-30N 28-01-45E			3
Plissa 2		55-11-30N 27-54-45E			4
POSTAVY Sivtsy		55-09-30N 26-53-45E			1
Bogatoye		54-57-15N 26-28-45E			4
PRUZHANY Strigovo		53-23-15N 24-14-30E			4
Shcherby		52-23-00N 24-10-00E			4
RUZHANY Shchitno 1		52-43-15N 24-58-15E			4
Shchitno 2		52-41-00N 24-57-30E			4
SATEIKIAI Telsiai		55-56-45N 22-07-00E			4
Alsedziai		56-00-15N 22-06-00E			4
SLONIM Byten		52-54-30N 25-22-00E			2
SMORGON Smorgon		54-34-45N 26-21-30E			2
TAURAGE Skudvile		55-23-00N 22-31-00E			4
Taurage		55-10-00N 22-14-30E			2
TORVA Valga		57-50-15N 25-54-15E			4
UKMERGE Gelvonai		55-07-15N 24-43-45E			4
Balninkai		55-13-00N 25-02-00E			4

25X1

TABLE 5. (Continued)

LOCATION*	BE NUMBER	COORDINATES	NEGATION DATE	FIRST OBSERVED	NO OF PADLIKE CLEARINGS
USOVO Luginy		51-08-00N 28-23-00E			4
YELSK Yelsk		51-50-45N 29-05-15E			4
ZAGARE Dobele 1		56-40-00N 23-11-45E			4
Dobele 2		56-40-45N 23-06-45E			4
ZHITOMIR Berdichev		49-51-30N 28-25-30E			2
ZHMERINKA Vinnitsa		49-13-15N 28-18-45E			4
Bar		49-05-30N 27-43-00E			4
ZNAMENSK Pravdinsk		54-23-00N 20-59-45E			3
Domnovo		54-25-30N 20-53-00E			4

*TDI site designators have been adopted for the fixed field sites, which are listed under the nearest permanent IRBM/MRBM complex.

TOP SECRET

25X1

25X1

TABLE 6. COMPOSITION OF IRBM/MRBM COMPLEXES

No of Complexes	Containing Soft Sites Only				Containing Hard Sites Only			Containing Hard and Soft Sites			
	One Site, No Housing or Support Facility	One Site	Two Sites	Three Sites	One Site	Two Sites	Three Sites	Two Soft One Hard Site	One Soft One Hard Site	Two Soft One Hard Sites	One Soft Two Hard Sites
IRBM	4			2				1			4
	4				0	1	3				
MRBM	5	1	36	6				20	1		
	43							21	1		
TOTALS	9	1	36	8	0	1	3				

25X1

TOP SECRET

TOP SECRET

TOP SECRET